#### DOCUMENT RESUME

ED 456 215 CE 082 107

TITLE A Vision for the Future: Alberta Apprenticeship and Industry

Training--A Discussion Paper [and] Current Context and Selected Trends: A Profile of Apprenticeship and Industry Training in Alberta [and] A Vision for the Future: Responses to a Discussion Paper from the Alberta Apprenticeship and Industry Training Board and the Alberta Apprenticeship and

Industry Training Division. Keeping You Informed....

INSTITUTION Alberta Learning, Edmonton. Apprenticeship and Industry

Training.

PUB DATE 1997-00-00

NOTE 78p.; For related "A Vision for the Futue" documents, see ED

455 438 and ED 455 439. Produced with the Department of Advanced Education and Career Development. Some text may not

reproduce well.

AVAILABLE FROM Apprenticeship and Industry Training, Alberta Learning, 10th

Floor, Commerce Place, 10155-22 Street, Edmonton, Alberta, Canada T5J 4L5. Tel: 780-427-8765; Fax: 780-422-7376; Web

site: http//www.tradesecrets.org/. For full text:

http://www.tradesecrets.org/library/vision/vision96/ vision\_

for\_future.htm. For full text:

http://www.tradesecrets.org/library/vision/vision96/profile.

htm. For full text:

http://www.tradesecrets.org/library/vision/vision97/index.ht

m.

PUB TYPE Opinion Papers (120) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS Academic Standards; Access to Education; Adjustment (to

Environment); Adult Learning; \*Apprenticeships;

Certification; Conventional Instruction; Economic Climate; Education Work Relationship; Educational Demand; Educational

Finance; Educational Legislation; Educational Needs;

Educational Legislation; Educational Needs; Educational Objectives; \*Educational Policy; \*Educational Trends; Employers; Employment Qualifications; Foreign Countries; \*Futures (of Society); Government School Relationship; \*Industrial Training; Job Skills; Job Training; Labor Market; National Standards; Policy Formation; Population Growth; Postsecondary Education; Questionnaires; Relevance (Education); School Business

Relationship; State Programs; Student Characteristics; Trend

Analysis; \*Vocational Education

IDENTIFIERS \*Alberta; Canada; Vision Statements

#### ABSTRACT

These three publications examine the current state and future of apprenticeship and industry training in Alberta, Canada. The "Current Context" publication, released in October 1996, examines the following topics: the structure of apprenticeship and industry training in Alberta; enrollment and industry participation; Alberta's contribution to apprenticeship training and the interprovincial standards (Red Seal) program; funding apprenticeship and industry training; the emerging economic environment and skill requirements; and recent government initiatives. A "Vision for the Future," also published in October 1996, is a discussion



paper and outlines the vision and principles of apprenticeship and industry training in Alberta. The "Keeping you Informed" publication, released in March 1997, presents the responses from stakeholders to the discussion paper. Both the "Vision for the Future" and the "Keeping You Informed" responses are structured around 14 specific goals and strategies related to responsiveness, accessibility, affordability, and accountability. The following are among the recommendations discussed in both papers: (1) redesign the advisory committee network; (2) consider opportunities for flexible certification; (3) increase flexibility in methods of formal instruction; (4) review the regulatory framework; (5) communicate alternative ways of accessing apprenticeship training; and (6) provide apprentices with appropriate financial supports. The three documents include a total of 21 tables/charts and a questionnaire examining the vision and principles of apprenticeship and industry training in Alberta and strategies for achieving them. (MN)



A Vision for the Future:

Alberta Apprenticeship and Industry Training.

A Discussion Paper

**Current Context and Selected Trends:** 

A Profile of Apprenticeship and Industry Training in Alberta

A Vision for the Future.

Responses to a Discussion Paper from the Alberta Apprenticeship and Industry Training Board and the Alberta Apprenticeship and Industry Training Division.

Keeping You Informed....

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION

CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

C. Andrews

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

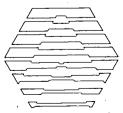
**BEST COPY AVAILABLE** 



# A VISION FOR THE FUTURE

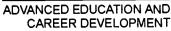
### Alberta Apprenticeship and Industry Training

A discussion paper
October 1996



Alberta Apprenticeship Excellence Through Training and Experience







# May We Suggest . . .

ttached in the centre of this discussion paper is a response form that relates to each section of the paper.

May we suggest . . . that you respond to the questions on the form as you complete each section? Of course, you may wish to devise your own strategy for completing the response form and returning it to us. What ever works for you . . . is fine with us!

The response form is your opportunity to share your thoughts on the ideas contained in this discussion paper. Please feel free to attach additional pages with your comments. If you do, please make sure to reference the relevant section and question.

After completing the response form, please mail it to the address listed below, or FAX it to (403) 422-4933.

#### Mail to:

A Vision for the Future c/o Alberta Apprenticeship and Industry Training Board 10th Floor, Commerce Place 10155 - 102 Street Edmonton, Alberta T5K 1C5

Please support the process by providing your comments as soon as possible and no later than December 13, 1996.

This survey can also be done over the Internet.

The address for the discussion paper and response form for A Vision For The Future is: http://www.gov.ab.ca/dept/aecd/divisions/apprenticeship/vision/vision.html

To read the companion paper Current Context and Selected Trends, go to: http://www.gov.ab.ca/dept/aecd/divisions/apprenticeship/vision/profile.html



Table of Contents	Foreword	i
	Background	1
	Reason for Consultation	1
	About This Paper	2
	Vision and Principles	2
	Goals and Strategies	3
	Responsiveness	3
	Accessibility	7
	Affordability	11
	Accountability	13
	Conclusion	15
	We Invite You To Respond	15
	Glossary of Terms	17
	Trades and Occupations in Alberta, 1996	18



### Foreword

When the Apprenticeship and Industry Training Act came into effect in 1992, the Alberta Apprenticeship and Industry Training Board and industry stakeholders made a commitment to continue consulting with Albertans. This consultation initiative "A Vision For The Future" is an important part of honouring that commitment. The consultation is especially appropriate at this time given the significant changes that we are experiencing in Alberta's and Canada's economic and social climates. This includes the significant changes that we have seen in the world of work and the need for skills training.

The first phase of the consultation, focus groups with representatives of industry and public institutions that deliver apprenticeship training, was completed in June 1996. Participants discussed the challenges facing apprenticeship and industry training today and gave us their advice on ways to ensure a quality system for the future.

The second phase of the consultation is now underway. This discussion paper, incorporating input from the focus groups and elsewhere, is being widely distributed in Alberta with an invitation for comments from all recipients. The paper does not represent government or Board policy, but presents ideas and options for discussion. The paper will be one of the topics at the annual Minister's Forum on Adult Learning to be held in November by the Minister of Advanced Education and Career Development.

Input to the discussion paper will be used in the third phase by the Board and the department to make recommendations to the Minister of Advanced Education and Career Development about a vision for apprenticeship and industry training in the future and policy proposals to achieve that vision.

Your involvement is important. We look forward to your participation in this important consultation process on the future of apprenticeship and industry training in Alberta.



### **Background**

The Alberta Apprenticeship and Industry Training Board and the Department of Advanced Education and Career Development are working together to continue a strategic planning process, begun in 1993, called *Adult Learning: Access Through Innovation*. They are consulting with industry and other stakeholders about Alberta's future needs for a skilled workforce.

Adult Learning: Access Through Innovation focused broadly on developing a renewed system of adult learning. This current consultation process, A Vision for the Future: Alberta Apprenticeship and Industry Training focuses specifically on Alberta's apprenticeship and industry training system, and its ability to continue to respond effectively to the needs of individuals, industry and society.

The apprenticeship and industry training system is a key part of Alberta's larger system of adult learning. The current system has served us well. However, we are in an era of rapid technological change and labour market adjustment. Most jurisdictions in Canada, as well as other countries, are involved in education and training reform, including apprenticeship reform, as one response to the challenges and opportunities expected in the future.

# Reason for Consultation

Current forecasts of private sector investment indicate that Alberta is about to enter a period of relatively strong economic growth and industrial development. This growth will create a challenge for Alberta's apprenticeship and industry training system to match the growing demand for skilled labour. The system will be under some pressure to resource this growing demand, given that government financial support is not expected to grow significantly in the future.

There are other changes in the social and economic environment creating challenges and opportunities for apprenticeship and industry training:

- The Alberta economy is restructuring. It is becoming more oriented to information and globally competitive. Work is becoming more technologically sophisticated and specialized.
- Albertans want access to quality training that will help them be productive members of the workforce, and enable them to be mobile and flexible when new work opportunities arise.
- Employers want workers to possess a variety of skills that permit them to be more flexible in the workplace.
- The Alberta business community wants less government regulation.
- Federal and provincial funding for apprenticeship and industry training is changing, like funding for other adult learning programs in all jurisdictions.
   There will be little growth in public resources to support expanded training programs.
- Continuous improvement and productivity gains in program delivery are ongoing expectations of the provincial government. Taxpayers are demanding greater accountability and efficiency from government.

Alberta's apprenticeship and industry training system has evolved as a partnership between employers, employees and government. Publicly-funded training institutions are key participants in the system. The impact of the above social and economic changes on Alberta's apprenticeship and industry training system needs to be discussed by these stakeholders, and other Albertans.



# About this paper

The Alberta Apprenticeship and Industry Training Board and the Department of Advanced Education and Career Development invite you to help them develop a vision for the future of Alberta's apprenticeship and industry training system and the strategies for achieving the vision.

This discussion paper proposes a vision for apprenticeship and industry training in Alberta, proposes the principles that underlie that vision and suggests goals to realize the vision. The paper outlines some strategies identified by the Alberta Apprenticeship and Industry Training Board and the Department of Advanced Education and Career Development to achieve the goals.

This paper is provided for your review and comment. A response form is included in the middle of the paper for your use. The responses and advice from industry, as represented by employers and employees including journeymen, apprentices and trainees, and employer and employee associations, training institutions and other Albertans, will be used by the Board and the department to make recommendations to the Minister of Advanced Education and Career Development. The recommendations will include a vision for apprenticeship and industry training and policy proposals to achieve that vision.

# Vision and Principles

e need to affirm a vision for apprenticeship and industry training in Alberta.

We propose the following Vision for the future:

Albertans believe that a highly skilled and trained workforce is essential to the economic well-being of the province. They believe that Alberta's apprenticeship and industry training system is a key component of the province's world-class workforce. Albertans want a system that is led by industry, and is based on the apprenticeship model of on-the-job training and work experience combined with formal, technical training. They also want a system that is **responsive** to the needs of individuals and employers, accessible to all qualified persons, affordable for apprentices and trainees, employers and other taxpayers, and accountable for quality results. Albertans believe that the apprenticeship model is the preferred approach to learning for young Albertans moving from school to the workforce, and for adults training in a wide spectrum of industries and occupations.

### **Principles**

- The following seven principles support the above vision, and could form the foundation of our apprenticeship and industry training system in the future.
- 1 Albertans who wish to pursue a career in the trades or designated occupations have an opportunity to participate in apprenticeship and industry training.\*
- 2 Apprentices and trainees in designated occupations have opportunities to acquire the highest possible standards of knowledge and skills to enable them to be successful members of the workforce and industry.
- \* A glossary is provided at the end of this paper.
  Terms such as "designated occupations" and "trainee" are described. Throughout this paper, "occupations" means designated occupations.



8

- 3 Apprentices and trainees will make a financial contribution such as tuition fees to the costs of formal instruction, like other post-secondary learners.
- 4 Province and nation-wide industry standards are the foundation of apprenticeship and industry training in Alberta.
- 5 Industry (employers and employees) is responsible for on-the-job training and work experience.
- 6 Apprenticeship and industry training is based on effective partnerships between and among government, industry, and apprentices/trainees.
- 7 Government, with advice from industry, has a role in regulating apprenticeship training and the skills and competencies required to work in the trades.

### Goals and Strategies

Our primary goals are to ensure that Albertans have opportunities to participate in high quality apprenticeship and industry training, and that the needs of apprentices, trainees and industry for high quality and relevant training programs are met.

At a more specific level, we are working toward four goals for Alberta's apprenticeship and industry training system: responsiveness, accessibility, affordability, and accountability. All parts of Alberta's adult learning system measure their performance against these goals.

What follows is a discussion about how we might realize these goals through various strategies. Implications of each strategy are noted. Before we recommend adoption of all or any of these strategies, it is important for us to have your opinion. Please complete the response form and return it to us.

### Responsiveness

**The Goal....** Alberta's apprenticeship and industry training system will anticipate and meet the skill development needs of individual Albertans and the skilled workforce requirements of Alberta employers.

Alberta's industry is increasingly technologically complex. Our workplaces are becoming more knowledge-based and centred on technology and computerized processes. Skills are becoming obsolete very quickly. Workers and employers are recognizing a need for frequent skill updating and upgrading. The apprenticeship and industry training system must respond quickly to changes in the economy, and to changes in industry standards and training and curriculum needs.

The structure of training in the current system has made it difficult for some individuals to attend formal instruction because of the block release format. More flexible approaches are needed for formal instruction.



Some suggested strategies and their implications...

#### \* See glossary for a description of Provincial Apprenticeship Committees and Local Apprenticeship Committees

### 1 Redesign the advisory committee network\*

Currently, each trade has a provincial apprenticeship committee, and most trades also have local apprenticeship committees. There are concerns that roles are not well understood and advice to the apprenticeship and industry training system is not as timely as it could be. As well, there is little cross-trade dialogue, so individual trades may not be aware of important technological and curriculum developments in other areas.

A redesign of the advisory network might improve its responsiveness to the changing industry environment and help keep training information current. Consideration could be given to having a one-level advisory system, combining local apprenticeship committees and provincial apprenticeship committees. The new advisory committees could represent clusters of allied trades, where there are common skills and work requirements. Trade-specific committees would address matters unique to a particular trade. To strengthen the advisory network greater input from industry associations in nominating membership would be sought. Advice and presentations from broad industry sectors would be welcomed. Community stakeholders could come together as needed to offer local advice to the new advisory committee.

### **Implications**

- moving to a single-level advisory network would encourage more meetings to be held, and improve the effectiveness and timeliness of industry information and advice.
- moving to a trade-cluster approach would encourage cross-trade dialogue.
- industry participation in nominating membership would increase industry commitment to the process.
- industry would need to participate more than it has in the past.

# 2 Extend recognition of apprenticeship training toward other post-secondary programs

Persons who have successfully completed accredited programs such as trades training received while in high school (called the Registered Apprenticeship Program or RAP), training received in pre-apprenticeship courses, in technician programs, technology programs, or training received in an allied trade, are granted advanced standing in the trade when they register as an apprentice.

These accreditation initiatives are consistent with a policy established by the Alberta Apprenticeship and Industry Training Board to ensure that prior learning receives recognition within Alberta's apprenticeship and industry training system. Persons can also receive advanced standing in an apprenticeship program for prior work experience in that trade.



Discussions should take place regarding apprenticeship training receiving accreditation toward other post-secondary programs in Alberta's colleges, technical institutes and universities. Certified journeymen could receive advanced standing toward degree and diploma programs in allied technologies, business and management occupations and the professions. In a time when the world of work is rapidly changing, and lifelong learning is a necessity, persons trained in and working at the trades must upgrade and broaden their skills if they are to remain competitive and adaptable in a rapidly-changing world. Accreditation of apprenticeship training toward training in other occupations and professions would make trades' training a more attractive career choice for Albertans, and facilitate lifelong learning for persons working in the trades.

### **Implications**

- training for career advancement would become more prevalent among persons working in the trades.
- more lifelong learning opportunities would become available for trades people. More tradespeople would seek dual and triple certification.
- more tradespeople would be encouraged to seek career advancement opportunities. This could be facilitated by accrediting apprenticeship programs toward degrees and diplomas at Alberta's post-secondary institutions.
- the trades would become a more attractive career option for young Albertans and their parents.

### 3 Consider opportunities for flexible certification

A lberta's apprenticeship and industry training is founded on broad-based training. This approach enhances worker flexibility and mobility, and is important to maintain. As technologies and industries change, and as business becomes more specialized, some employers and their employees may find that parts of the formal instruction and on-the-job training in their trade or occupation are not needed. Without sacrificing the principle of broad-based training and worker mobility, training and certification could be made more responsive for apprentices, trainees in designated occupations and employers. Training and certification in broad craft areas in some trades and occupations could be made available. Full training and certification in the trade or occupations would continue to be available.

An example may be the Heavy Equipment Technician trade, where journeymen have been trained in the mechanics of various forms of heavy industrial equipment (off road), trucks and busses, and highway trailer repair. Many journeymen spend their entire careers in one of these broad sectors of the industry. There could be certification for each of these sectors and for the entire trade. In other jurisdictions, sectors of this trade have been designated as three separate Red Seal trades.

Another example is found in the Warehousing occupation where there are three levels of certification: Basic, Intermediate and Technician.



### **Implications**

- could be more responsive to apprentices', trainees' and employers' needs for relevant training and certification.
- could provide a base for apprentices and trainees to respond quickly to changes in industry circumstances.
- would still provide broad-based training and flexibility and mobility for interested workers, but could lead to increased specialization for others.
- would have costs associated with reworked accredition.
- may be viewed by some as fragmentation of the trade.
- would conform more closely to trade designations and training standards in other Canadian jurisdictions.
- could recognize regional (urban/rural) needs.

### 4 Increase flexibility in methods of formal instruction

ost apprentices now take their formal instruction in six to eight week blocks of time, led by an instructor at one of Alberta's technical institutes or colleges. System responsiveness could be enhanced if more alternatives to block release were available, such as weekly apprenticeship instruction, and more individually-paced learning opportunities were available, such as Competency Based Apprenticeship. Alternatives such as home-study or study in a community setting or the workplace could reduce the need for on-campus training at a technical institute or college. Responsiveness could be enhanced further if curriculum materials were available to apprentices and trainees as individual learning units. This would allow more effective accreditation processes to be applied between trades and occupations, and prior learning experiences to be recognized. Opportunities to use new technologies for teaching and learning could be explored.

### **Implications**

- apprentices, trainees and employers would be able to schedule training opportunities at times and places that meet their needs, improving accessibility to training.
- formal instruction could be competency-based, rather than based on time spent in a classroom.
- training in some trades and occupations might still be better provided through block release.
- more effective accreditation processes could be applied.
- design and development costs for new training approaches can be more costly.



12

# 5 Promote apprenticeship and industry training in new occupations

The apprenticeship model of industry-oriented training (on-the-job training and work experience combined with periods of formal in-school instruction), is a universally recognized form of training for employees developing work-related skills. Historically, this model has been used primarily to train persons in construction trades and trades in the goods-producing sectors of the economy.

The apprenticeship model of industry training could be made available to individuals seeking training in other sectors of the economy. When industry identifies training needs that are currently not being met, recognized standards for training and certification in these areas could be developed. Any financial support would need to come mainly from existing resources or new industry financial support would need to be identified.

### **Implications**

- would assist Albertans to acquire practical career-related training opportunities, and industry to develop a skilled workforce.
- would provide access to training in emerging industries and in occupations where formal training does not now exist.
- to lever new public funding, new financial support from industry, or realigned public support within existing public funding, would be critical for expansion.

### Accessibility

**The Goal...** Increase opportunities for Albertans to become apprentices and trainees, and increase opportunities for employers to hire and train apprentices and trainees.

There are many aspects to accessibility. The format of formal instruction relates to both system responsiveness and accessibility and was addressed in the previous section on Responsiveness. Two other aspects include issues concerning access to training for apprentices and trainees, and issues concerning access to work for qualified workers.

Access to training: Apprentices and trainees need to find employers willing to employ them and provide them with on-the-job training and work experience. In the trades, there are strongly held but opposing views on whether compulsory apprenticeship promotes training or limits training opportunities. As well, there is also a view that legal provisions which require employers to pay their apprentices prescribed percentages of journeyman wages, and employ a minimum ratio of journeymen to apprentices, may discourage some employers from hiring apprentices and providing access to training.

Our current model of apprenticeship and industry training reinforces the business cycle, rather than acting to balance skilled labour force requirements and skilled labour force supply over the longer term. During uncertain economic climates, apprentices and trainees may have difficulty finding an employer who is willing to hire and register them. This results in uneven opportunities for apprentices,



inefficiencies at institutions, and a fluctuating supply of skilled labour for employers. Some employers' lack of awareness of the benefits of employing and training apprentices may also limit the number of training opportunities available. Greater involvement of such businesses in the advisory network might help address that problem. A final aspect of "access to training" is the need to ensure that youth are aware of career opportunities in the trades and occupations, and have easy access to beginning those careers.

Access to Work: Another aspect of improving access relates to labour mobility. Opportunities to work in other jurisdictions and internationally are increasing, and with that comes the challenge and need to assess the competency of workers from other jurisdictions. Alberta, along with other Canadian jurisdictions, is a signator of the Agreement on Internal Trade, an agreement which among other things, promotes labour mobility in Canada. The Agreement requires that practices for licensing, certifying and registering workers are to be based mainly on competence. Across Canada, jurisdictions are putting programs in place to comply with the Agreement. Alberta will be implementing a Qualification Certificate Program to comply with the Agreement.

Some suggested strategies and their implications . . .

### 6 Review the regulatory framework

The government has committed to reduce government regulation wherever it is appropriate and safe to do so. There are many levels of regulation within the Apprenticeship and Industry Training Act and its regulations. Discussion is needed to determine which regulation must be retained and which regulation might be removed.

Currently, regulations govern such matters as entrance requirements to apprenticeship training, minimum wages paid to apprentices (as a percentage of wages paid to journeymen), and the ratio of journeymen to apprentices in both compulsory and optional certification trades, among other matters. A review of regulatory requirements should examine whether it is necessary for government to legislate in a particular area, or whether there would be less intrusive means of assuring quality training.

### **Implications**

- ensuring continued high quality apprenticeship and industry training would be the dominant consideration in a review of regulations.
- removing unnecessary regulation could make the training system more accessible and responsive to the training needs of Albertans and employers.



### Response Form

### **A Vision for the Future**

### **Apprenticeship and Industry Training In Alberta**

### **Section 1: Vision and Principles**

Please read the draft statements on pages 2 and 3 of the discussion paper.

	you agree with the Vision proposed on Page 2? ase circle your response on the right hand side)	Yes	No	No Opinion
Wha	would you change, or add			
	uld the following seven Principles form the foundation for renticeship and industry training in the future?			
1.	Albertans who wish to pursue a career in the trades or designated occupations have an opportunity to participate in apprenticeship and industry training. (See page 2)	Yes	No	No Opinion
WI	nat would you change, or add			
2.	Apprentices and trainees in designated occupations have opportunities to acquire the highest possible standards of knowledge and skills to enable them to be successful members of the workforce and industry. (See page 2)	Yes	No	No Opinion
W	hat would you change, or add		·	
3.	Apprentices and trainees will make a financial contribution, such as tuition fees, to the costs of formal instruction like other post-secondary learners. (See page 3)	Yes	No	No Opinion
W	/hat would you change, or add		_	



4.	Province and nation-wide industry standards are the foundation of apprenticeship and industry training in Alberta. (See page 3)	Yes	No	No Opinion
	Vhat would you change, or add			
5.	Industry (employers and employees) is responsible for on-the-job training and work experience. (See page 3)	Yes	No	No Opinion
	Vhat would you change, or add			· · · · · · · · · · · · · · · · · · ·
			_	
6.	Apprenticeship and industry training is based upon effective partnerships between and among government, industry and apprentices/trainees. (See page 3)	Yes	No	No Opinion
V	Vhat would you change, or add	· 		
<b>7</b> .	Government, with advice from industry, has a role in regulating apprenticeship training and the skills and competencies required to work in the trades. (See page 3)	Yes	No	No Opinion
٧	Vhat would you change, or add			
V			_	



### Section 2: Goals and Strategies

G	oa	İS

Responsiveness Alberta's apprenticeship and industry training system will anticipate and

meet the skill development needs of individual Albertans and the skilled

workforce requirements of Alberta employers.

Accessibility Increase opportunities for Albertans to become apprentices and trainees,

and increase opportunities for employers to hire and train apprentices and

trainees.

Affordability Apprenticeship and industry training will be affordable for the taxpayer,

employers, and apprentices and trainees. The system will be fair and

efficient.

Accountability All participants will have clearly identified roles and responsibilities, and

will be accountable for achieving quality results in their roles.

Generally, do you agree with the Goals? (please circle)	Agree 1	Disagree 2	No Opinio
What would you change, or add	·		

### **Strategies**

**Responsiveness** Please read the draft strategies, pages 4 to 7. Do you agree with each of the strategies proposed? (please circle)

1.	Redesign the advisory committee network. (See page 4)	Agree 1	Disagree 2	No Opinion 3
	/hat would you change, or add			
(8	Would a one-level committee network improve the effectiveness and timeliness of industry advice?	Yes	No	No Opinion
(t	Would a trade cluster approach encourage effective cross-trade dialogue leading to improved apprenticeship training?	Yes	No	No Opinion



ur comments about either (1a) or (1b)			
Extend recognition of apprenticeship training toward other post-secondary programs. (See page 4)	Agree 1	Disagree 2	No Opinion
<u> </u>			
Consider opportunities for flexible certification (e.g. training and certification in different craft areas in some trades). (See Page 5)	Agree 1	Disagree 2	No Opinion 3
Increase flexibility in methods of formal instruction. (See Page 6)	Agree 1	Disagree 2	No Opinion 3
Promote apprenticeship and industry training in new occupations. (See Page 7)	Agree 1	Disagree 2	No Opinion 3
·			
	to 10. Do you a	agree with ea	ch of the
Review the regulatory framework. (See Page 8)	Agree 1	Disagree 2	No Opinion 3
	Consider opportunities for flexible certification (e.g. training and certification in different craft areas in some trades). (See Page 5)  What would you change, or add	Extend recognition of apprenticeship training toward other post-secondary programs. (See page 4)  It would you change, or add  Consider opportunities for flexible certification (e.g. training and certification in different craft areas in some trades). (See Page 5)  Agree 1  Increase flexibility in methods of formal instruction. (See Page 6)  Individually you change, or add  Promote apprenticeship and industry training in new occupations. (See Page 7)  Individually you change, or add  Coccessibility Please read the draft strategies on pages 7 to 10. Do you attegies proposed? (please circle)  Review the regulatory framework. (See Page 8)  Agree	Extend recognition of apprenticeship training toward other post-secondary programs. (See page 4)  Consider opportunities for flexible certification (e.g. training and certification in different craft areas in some trades). (See Page 5)  Agree 1  Chat would you change, or add  Increase flexibility in methods of formal instruction. (See Page 6)  Agree 2  Chat would you change, or add  Promote apprenticeship and industry training in new occupations. (See Page 7)  Ceessibility Please read the draft strategies on pages 7 to 10. Do you agree with eartigeies proposed? (please circle)  Review the regulatory framework. (See Page 8)  Agree Disagree Disagree



7.	Clarify the criteria for designation of compulsory certification trades (for example public safety, worker safety, and the environment could determine the requirement for compulsory certification). (See Page 9)	Agree 1	Disagree 2	No Opinion 3
	What would you change, or add			
8.	Communicate the alternative ways of accessing apprenticeship training. (See Page 9)	Agree 1	Disagree 2	No Opinion
	What would you change, or add			
9.	Expand opportunities for youth in apprenticeship and industry training. (See Page 10)	Agree 1	Disagree 2	No Opinion
	What would you change, or add			
Do	ffordability Please read the draft strategies on pages 11 you agree with each of the strategies proposed? (please conclusions). Review the administrative framework for apprenticeship and industry training. (See Page 11)		Disagree 2	No Opinion 3
	What would you change, or add			
,				



11.	Provide apprentices with appropriate financial supports. (See Page 12)	Agree 1	Disagree 2	No Opinion
<b>W</b> h	nat would you change, or add			
12.	Encourage greater industry participation in renewing technology for in-school training. (See Page 13)	•	Disagree 2	No Opinion 3
Wh 	nat would you change, or add			· · · · · · · · · · · · · · · · · · ·
13.	Avoid duplication in providing formal instruction. (See Page 13)	Agree 1	Disagree 2	No Opinion
Wh	nat would you change, or add			
	COUNTAbility Please read the draft strategy on pountability on pountability on pountable of the strategy proposed? (please circle)	page 14. e).		
14.	Clarify roles for apprenticeship and industry training participants. (See Page 14)	Agree 1	Disagree 2	No Opinion 3
Wh	nat would you change, or add			
Se	ction 3			
Ques	stion: In your opinion, what is the most important a and industry training in Alberta? (attach ad	ction that could be ditional pages if re	taken to impro quired)	ove apprenticeship
				·



### **Section 4**

a)	a)	yea	Are you currently or have you been, in the past three years, an apprentice or an employer of apprentices? (please circle) if yes, please go to (b) below.  if no, go to (c) below.		YES			NO
	b)	Generally, how satisfied have you been that the current Alberta apprenticeship and industry training system has been meeting your training needs? (please circle relevant number)	Very Sati 1	sfied . 2	3	Ver	y Dissatisfie 5	
	c)	Are you currently or have you been, in the past three years, an employer of journeymen? (please circle)	·	YES	8		NO	

### Section 5 Background Information

(To assist us in our analysis of the responses, please complete the section below	w. Please c	heck all that apply)		
Affiliation	Position			
□ employer association	□ employe	er		
□ employee association	□ employe	ee		
□ company, business or firm	□ apprent	ice		
□ private educational provider	□ trainee	(warehousing, plasterer,		
□ government		gas utility operator)		
□ community association	□ journeyman			
□ public post-secondary institution	□ student	(other than apprentice)		
☐ K-12 school system	□ faculty			
□ Other (please specify)	$\square$ other (please specify)			
□ N/A	□ N/A			
1. Have you completed an apprenticeship? (circle yes or no)	YES	NO		
2. In which trades or designated occupations do you primar persons?	rily work (	or employ other		
☐ If N/A please go to Question #5				



3.	In what kind of business, industry or service?	_
4.	What kind of product or service does your company produce or provide?	_
5.	If you are the designated respondent for an association, company, business or firm, please provide its name, address and telephone number:	_
6.	If you are employer, please indicate the size of company, business or firm (circle # of employees)	50+
7.	In or near what city or town are you (or your association, company, business or firm	if

Thank you for taking the time to provide us with your comments.

applicable) located?

If you wish to have your name placed on our mailing list so that you can receive further information about the consultation, please fill out the form on Page 19 of the "Vision" document and return it with the response form.

In addition to filling out this response form, please feel free to attach additional pages with your comments. If you do, please make sure to reference the relevant section and question. After completing the response form, please mail it to the address listed below or FAX it to (403) 422-4933.

A Vision for the Future
Apprenticeship and Industry Training In Alberta
c/o Alberta Apprenticeship and Industry Training Board
10th Floor, Commerce Place
10155 - 102 Street
Edmonton, Alberta T5K 1C5

Please support the process by providing your comments as soon as possible and no later than **December 13, 1996.** 



### 7 Clarify the criteria for designation of compulsory certification trades

The Apprenticeship and Industry Training Act governs training and certification requirements in trades and occupations. The Act provides for trades to be designated as either compulsory certification trades (currently 19 trades) or optional certification trades (currently 31 trades). A list of compulsory and optional certification trades appears on Page 17. At the present time, apprenticeship training is compulsory in both types of trades.

In optional certification trades, a person is not required to hold a trade certificate to work in the trade if an employer is satisfied that an uncertified person has the skills to do the work. Similarly, an uncertified self-employed person may work in an optional certification trade.

In a compulsory certification trade, unless a person is an apprentice or is otherwise authorized to work, that person is required to hold a recognized trade certificate to work in the trade. Public and worker safety have been the major criteria for designation as a compulsory trade in the past.

The Board could work with industry to redevelop the criteria for designation as a compulsory certification trade. This could be followed by a review of all trades and redesignation where appropriate. The new criteria for designation as a compulsory certification trade would be centered on a risk analysis approach. This approach would gauge the probability and severity of adverse impacts on public safety, worker safety and the environment associated with the materials, methods or technology involved with the trade.

### **Implications**

- public safety, worker safety and the environment could determine the requirement for compulsory certification.
- some trades may be redesignated.
- would facilitate the approval process for applications for designation of new or additional trades.

### 8 Communicate the alternative ways of accessing apprenticeship training

Currently, most apprentices must sign a contract of apprenticeship with an employer who is either a journeyman in the trade, or employs a journeyman in the trade to supervise the on-the-job training and work experience of the apprentice. In optional certification trades, self-employed apprentices (sole proprietors) are allowed to enter into contracts of apprenticeship with other individuals or firms provided that all prescribed requirements for supervision and training are met.

Most individuals who are interested in apprenticeship training begin their career by seeking a contract of apprenticeship, which then results in some on-the-job work experience followed by a first period of formal instruction. Other avenues to apprenticeship training exist. Individuals can choose to take a pre-employment program at a technical institute or college, at a privately sponsored training centre or through a recognized high school program. They may also choose to complete a



technical or technology program before seeking a contract of apprenticeship with an employer. Depending on the trade, credits are available toward the trade's formal instruction requirement. These alternative ways of beginning to train for a career in the trades and occupations could be communicated. (Note: Since 80% of apprenticeship training is on-the-job training and work experience, prospective apprentices will still ultimately be required to find an employer who will train them.)

### **Implications**

- would increase individuals' awareness of multiple entry options to apprenticeship and industry training, and increase training undertaken.
- would provide more continuity in training opportunities for apprentices throughout the business cycle, a more even supply of skilled labour for employers, and more stable enrollments for institutions.

## 9 Expand opportunities for youth in apprenticeship and industry training

There will be many opportunities in the trades and occupations in coming years, and it is essential that young Albertans be aware of these opportunities for well-paying and satisfying careers. Industry must play a leadership role in promoting the trades and occupations to young Albertans. Employers should be encouraged to participate in school career counselling, and provide information on the types of work they do and the skills and training needed to work in their trade or occupation, so that young Albertans can make informed judgements about career possibilities and requirements.

There also needs to be improved access to trades and occupations at the high school level. The Registered Apprenticeship Program (RAP) has been successful and could be expanded with further commitments from industry. A Youth Career Program could be developed, similar to RAP but oriented to youth interested in careers in occupations, rather than designated trades. Expansion of these programs would require further coordinated efforts among the private sector, Alberta Education and school boards, and Advanced Education and Career Development.

#### **Implications**

- student and public knowledge of the trades and occupations would be improved.
- the transition from school to work would improve for students pursuing a trade or an occupation.
- young people would graduate from high school with a head start toward a career.
- there would be costs related to distributing information, expanding counselling services, and working with community businesses to expand local work experience opportunities.



10 24

### **Affordability**

**The Goal....** Apprenticeship and industry training will be affordable for the taxpayer, employers, and apprentices and trainees. The system will be fair and efficient.

Apprenticeship training is financed by employers, the province and apprentices, with income support provided by the federal government for apprentices qualifying for Employment Insurance. Employers support apprenticeship training through wage payments to apprentices for on-the-job training, through providing supervising journeymen and, in some cases, through providing tools to apprentices and equipment to institutions. The province supports apprenticeship training through funding the industry advisory network and through administrative support for field delivery, the setting of standards, advice on labour market issues, and the development of course outlines, examinations and accreditiation, and through its funding of formal instruction. The costs of occupational training are supported very differently, with industry and trainees bearing all costs except the province's provision of secretariat support for industry advisory committees.

Provincial resources to support training will continue, but growth in public spending is expected to be modest. The government is also committed to reducing its administrative overhead across all program areas.

Industry has expressed some interest in taking on more financial responsibility for training, but has also expressed concern that some employers do not contribute fairly to worker training. The concern is that only some employers participate and bear the costs of training apprentices, while others do not participate and hire only journeymen.

Several of the preceding strategies, such as those to improve flexibility in the system and reduce the regulatory burden, would improve the system's affordability to the taxpayer. Further strategies are noted below.

# Some suggested strategies and their implications . . .

# 10 Review the administrative framework for apprenticeship and industry training

Currently, apprenticeship and industry training is administered by the Department of Advanced Education and Career Development working with the Alberta Apprenticeship and Industry Training Board. Public priorities continue to focus on reducing provincial government administrative costs, and services are being scaled down, devolved, or privatized where appropriate as government removes itself from a direct delivery role. Government now requires continuous improvement in system efficiency when public resources are used to support program delivery.

A review of the administrative framework of apprenticeship and industry training may be needed. The review could identify alternative means of administering the system, or adjustments that could make the current administrative approach more efficient. Industry may have suggestions on options for achieving administrative efficiencies. A guiding principle of the review would be that any proposed reforms would need to ensure the continuity of high quality administrative support to Alberta's apprenticeship and industry training system.



### **Implications**

- the review could identify achievable cost savings and improvements in administrative processes, supporting the goals of affordability and responsiveness.
- opportunities for a greater industry role in the system administration or funding could be identified.
- government would continue to be responsible for policy, regulations and funding of formal instruction.

### 11 Provide apprentices with appropriate financial supports

Apprentices will start paying tuition fees in the 1997-98 school year. Federal government training allowances have been discontinued. Employment Insurance benefits continue to be available for eligible apprentices while they attend school. Measures are being taken to ensure that apprentices are not financially prevented from attending the in-school portion of their apprenticeship program. The province has established an interim initiative with the federal government under which apprentices may apply for student financial assistance that supplements their Employment Insurance benefits. This assistance will normally be issued as student loans; in exceptional circumstances, grants may be provided. To be eligible for assistance, apprentices must prove financial need and maintain passing grades.

Further discussions are needed with the federal government about appropriate levels of support to apprenticeship and industry training, and apprentices and trainees. These might form part of negotiations toward a federal-provincial agreement on labour market arrangements.

Tax measures to be explored with the Federal Minister of Finance could include allowing tax credits for tools that apprentices and trainees have purchased, and changing the time requirements on employee-funded study leave to allow apprentices and trainees to save and contribute to learning opportunities.

### **Implications**

- interim federal support for student financial assistance has been negotiated, but the type of ongoing federal support is uncertain.
- additional costs to taxpayers would arise from additional tax assistance.



26

## 12 Encourage greater industry participation in renewing technology for in-school training

Currently, some employers provide considerable support to formal instruction by donating equipment and tools to post-secondary institutions. If industry increased its support in renewing technology at institutions, it could be assured that in school training would be current and based on recent technologies. The government has created an Infrastructure Renewal Envelope to be used by our post-secondary institutions to modernize and update equipment used for instruction.

These institutions are expected to provide matching resources to the public contribution, from either their own sources or from the private sector. New industry and institutional partnerships should increase to specifically support the renewal of infrastructure which is needed in trades and occupational training.

### **Implications**

- increased opportunity for industry participation in training, along with increased financial costs.
- financial savings to the taxpayer for the costs of formal instruction.
- would ensure that technology and materials are kept current.
- would recognize that infrastructure renewal is a shared responsibility.

### 13 Avoid duplication in providing formal instruction

Several technical elements of formal training are common to different trades. An example is the Electrician, Power Lineman, Power System Electrician, and the Electrical Rewind Mechanic trades. When apprentices are in a classroom environment, they most often move from class to class in a trade-specific group, while other trades are taking similar formal instruction across the hall. The instructional system could use training facilities and develop curriculum more efficiently by using common curriculum or individual learning units, where possible, among related trades.

### **Implications**

- apprentices and trainees may have broader opportunities to learn from classroom peers since not everyone would be in the same trade.
- there would be better articulation between the trades (prerequisite learning would be clearly identifiable).
- tradespeople could develop skills in a greater number of trades.
- could facilitate more dual and triple certification.
- financial savings to the taxpayer.



### **Accountability**

**The Goal .....** All participants will have clearly identified roles and responsibilities, and will be accountable for achieving quality results in their roles.

Apprentices and trainees, employers and employees, training institutions and the provincial government all participate and have roles and responsibilities in the apprenticeship and industry training system.

Apprentices and trainees complete required programs of on-the-job training, work-experience and formal instruction leading to certification in a trade or occupation. Industry plays the lead role in the training system by identifying the need for training and ensuring that the content and standards for training programs are current. The network of industry advisory committees advise the Alberta Apprenticeship and Industry Training Board on the training needs and content required by trades and occupations.

The Department of Advanced Education and Career Development works with industry advisory committees and the Board to develop training standards. The Department also provides secretariat support to the Board and administrative support to apprentices and the system by keeping a record of apprentices' contracts and training progress. Training institutions, funded by government as part of the adult learning system, develop and deliver the formal instruction component of apprenticeship.

These roles and responsibilities have served the system well for many years, and have provided stability and continuity while also accommodating a substantial amount of change. But rapid technological change, labour market adjustments, and public demand for greater accountability and efficiency from publicly-funded programs and services are challenging current roles and responsibilities. Roles need to be clear so that all participants in the system know their responsibilities, and the system can grow and respond to the demands of the future.

# Some suggested strategies and their implications . . .

### 14 Clarify roles for apprenticeship and industry training participants

Government will continue in its role of ensuring that legislation, policy and financial resources support an apprenticeship and industry training system that is accessible and responsive to Albertans seeking training, meets industries' needs for skilled labour, and that is also affordable and accountable to taxpayers. Government will ensure that performance indicators are used to monitor success in training programs and in administration.

Growth in public funding is expected to be modest in coming years. New ways to finance growth in apprenticeship and industry training need to be found by all participants. Apprentices will start to pay tuition in the 1997-98 school year, in recognition of the benefits they receive from publicly-assisted training. Greater financial participation by industry is contemplated in some of the strategies identified in the preceding pages.

Industry will continue to have a lead role in developing training standards for apprenticeship and industry training. In the future, employers and employees may also be called upon to take more of a lead role in promoting apprenticeship and



14 28

industry training in schools and communities. The structure of advisory networks may change, accompanied by changes in roles and responsibilities. Training institutions may also see their role and methods of instruction change as individuals and industry seek flexible approaches to formal instruction. Elements of possible new roles and responsibilities are part of many of the strategies identified earlier in this paper, and must also form part of discussions with partners and participants.

### **Implications**

- discussions on new roles and responsibilities will improve partners understanding of the system and of their responsibilities, and the responsibilities of other participants such as training institutions.
- will improve community understanding of apprenticeship and industry training, and the roles and responsibilities of all partners and participants.
- better understanding and commitment to roles will improve responsiveness, accessibility, affordability and accountability.

### Conclusion

A lberta's apprenticeship and industry training system is a model of excellence. The skills of Alberta's tradespeople and the quality of our training programs are recognized both nationally and internationally. There is no question that it is essential to Alberta's economic success and the competitiveness of our labour force that we maintain our current high standards and reputation.

We must now directly take on and meet the challenges and opportunities of technological changes and global competition. A first step is to jointly determine a vision for Alberta apprenticeship and industry training in coming years. We must then develop and choose strategies that will move us toward that vision. This paper, A Vision for the Future: Alberta Apprenticeship and Industry Training has offered some possible strategies for discussion.

It will be important in future to continue to promote apprenticeship and industry training and increase the public's awareness of the benefits of careers in the trades and occupations. With the participation and renewed commitment of Albertans, industry, training institutions and all other participants, we will ensure that Alberta's apprenticeship and industry training system continues to be a seen as a model for training skilled workers.

# We invite you to respond

We value your comments. Please circulate and discuss this paper with your friends and colleague to gather wider input. A response sheet is included in the centre of the paper for your convenience.

Your input is essential to the successful development of a report to the Minister of Advanced Education and Career Development that will recommend a vision for apprenticeship and industry training in the future as well as the policy proposals to achieve that vision.

The Response Form is your opportunity to share your thoughts on the ideas contained in this document. Please feel free to attach additional pages with your comments. If you do, please make sure to reference the relevant section and question.



29

After completing the response form, please mail it to the address listed below or FAX it to (403) 422-4933.

Mail to:

A Vision for the Future c/o Alberta Apprenticeship and Industry Training Board 10th Floor, Commerce Place 10155 - 102 Street Edmonton, Alberta T5K 1C5

Please support the process by providing your comments as soon as possible and no later than **December 13**, **1996**. This survey can also be done over the Internet.

The address for the discussion paper and response form for A Vision For The Future is: <a href="http://www.gov.ab.ca/dept/aecd/divisions/apprenticeship/vision/vision.htm/">http://www.gov.ab.ca/dept/aecd/divisions/apprenticeship/vision/vision.htm/</a>.

To read the companion paper Current Context and Selected Trends, go to: http://www.gov.ab.ca/dept/aecd/divisions/apprenticeship/vision/profile.html



### Glossary of Terms

**Industry** is both employers and employees.

A **Trade** is an occupation designated by the Lieutenant Governor in Council, pursuant to the *Apprenticeship and Industry Training Act* and on the recommendation of the specific industry, the Alberta Apprenticeship and Industry Training Board, and the Minister of Advanced Education and Career Development. A trade may be either a compulsory certification trade or an optional certification trade. A trade has established job skills and competencies and an established training program. When an apprentice achieves the standards of performance and fulfills the training established for the trade, the Minister grants a Journeyman Certificate to the apprentice.

An individual wishing to work in a **Compulsory Certification Trade** is required by legislation to hold a trade certificate or be a registered apprentice in the trade. An employer wishing to hire persons to work in the trade must hire only certified journeymen in that trade or individuals who are registered apprentices in the trade. If an employer hires an apprentice, the employer must provide a supervising journeyman. The employer must also provide the apprentice with appropriate training for the trade, be prepared to release the apprentice for periods of formal instruction, maintain a record book and pay wages to the apprentice in accordance with the regulations for that trade. Trades designated as requiring compulsory certification usually involve work where public and worker safety are important.

An individual is permitted to work in an **Optional Certification Trade** if he or she has the skills and knowledge expected of a certified journeyman in the trade. There is no requirement to hold a certificate in the trade. Employers may employ uncertified journeymen and use uncertified journeymen to supervise and train apprentices on the job. When an employer is training employees in an optional certification trade, a contract of apprenticeship is required (as for compulsory certification trades).

An **Apprentice** is an individual who has met the requirements to enter the apprenticeship program for a trade. The individual has contracted with an employer to apprentice in a trade and has had the contract registered with the Department of Advanced Education and Career Development.

A **Designated Occupation** is an occupation that has been approved by the Minister of Advanced Education and Career Development, under the *Apprenticeship and Industry Training Act*, on the recommendation of the specific industry and the Alberta Apprenticeship and Industry Training Board. Designated occupations have established job skills and competencies and an established training program. When a trainee achieves the standards of performance for the designated occupation, the Minister grants an Occupational Certificate to the trainee. Participation in a designated occupation is voluntary and a certificate is not required for an individual to work in the occupation.

A **Trainee** is an individual who is pursuing training in a designated occupation.

The advisory committee network for the trades is comprised of Provincial Apprenticeship Committees and Local Apprenticeship Committees. Provincial Apprenticeship Committees are made up of equal representation from employers and employees. These committees are responsible for advising the Alberta Apprenticeship and Industry Training Board on the training standards for their trade. Most trades also have Local Apprenticeship Committees to address local issues. The advisory network for occupations is comprised of Occupational Training Committees, each with equal representation from employers and employees, who advise the Board on the training standards for their occupation.

The **Agreement on Internal Trade** is an agreement signed by all Canadian governments in July 1994 to remove barriers to interjurisdictional trade and improve labour mobility. The Agreement commits jurisdictions to developing processes for mutual recognition of employment standards and occupational qualifications and to ensure that licensing, certification and registration requirements are based on competency. The process to obtain certification in a trade must be transparent, residency requirements are prohibited and time-certain dispute resolution processes are to be developed and implemented.



### Trades and Occupations by Designation Status, Alberta, 1996

				_	
Trade Name	Certification	Red Seal*	Trade Name	Certification	Red Seal*
Agricultural Mechanic	Optional	✓	Landscape Gardener	Optional	
Appliance Serviceman	Compulsory	✓	Lather-Interior Systems Mechanic	Optional	✓
Auto Body Technician	Compulsory	✓	Locksmith	Optional	
Automotive Service Technician	Compulsory	✓	Machinist	Optional	✓
Baker	Optional	✓	Millwright	Optional	✓
Boilermaker	Compulsory	✓	Motorcycle Mechanic	Compulsory	✓
Bricklayer	Optional	✓	Painter & Decorator	Optional	✓
Cabinetmaker	Optional	✓	Partsman	Optional	✓
Carpenter	Optional	✓	Plumber	Compulsory	<b>*</b>
Communication Electrician	Optional		Power Lineman	Optional	✓
Construction Craft Network Craft			Power System Electrician	Optional	
Concrete Finisher	Optional	<b>✓</b>	Printing & Graphic Arts Craftsman	Optional	
Cook	Optional	<b>✓</b>	Pre-Press		
Crane & Hoisting Equip. Oper.	Compulsory	<b>✓</b>	Press Bindery		
Boom Truck Operator Mobile Crane Operator			Bindery // Recreation Vehicle Mechanic	Compulativ	
Tower Crane Operator			Refrig. & Air Conditioning Mechanic	Compulsory Compulsory	<b>✓</b>
Electrical Rewind Mechanic	Optional	✓	Roofer	Optional	· •
Electrician	Computsory	✓	Sawfiler	•	•
Electronic Technician	Compulsory	✓	Circular Sawfiler	Optional	
Elevator Constructor	Compulsory		Sheet Metal Worker	Compulsory	✓
Floorcovering Installer	Optional .	✓	Sprinkler System Installer	Optional	✓
Gasfitter	Compulsory		Steamfitter-Pipefitter	Compulsory	✓
Glassworker	Optional	✓	Structural Steel & Plate Fitter	Optional	✓
Hairstylist	Compulsory	✓	Tilesetter	Optional	
Heavy Equipment Technician	Compulsory	✓	Tool & Die Maker	Optional	✓
Instrument Mechanic	Optional	✓	Transport Refrigeration Mechanic	Optional	
Insulator	Optional	✓	Water Well Driller	Optional	
Ironworker	Computsory	✓	Welder	Compulsory	✓
Metal Building Systems Erector					

Totals: 19 Compulsory Certification Trades, 31 Optional Certification Trades, 38 Red Seal Trades.

Note: Gas Utility Operator, Plasterer and Warehousing are Oesignated Occupations under

Section 36 of the Alberta Apprenticeship and Industry Training Act.



Interprovincial Standards Red Seal Trade.

### **Personal Information**

If you wish to be on a mailing list to receive further information about the consultation, please provide us with your name and address. Your name and address will be used only to compile a mailing list and is not part of the response form.

Your personal information will not be included in the analysis of the comments received in the response form. Our authority for collecting this information is Section 8 of the Government Organization Act.

If you have any questions about the collection of this information, you may contact the consultation office at:

A Vision for the Future, c/o Alberta Apprenticeship and Industry Training Board, 10th Floor, Commerce Place, 10155 - 102 Street, Edmonton, Alberta, T5K 1C5, telephone (403) 427-5805.

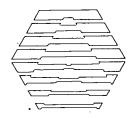
Name:		_
Position (if applicable):		
Association, Company, Business or F	irm Name (if applicable) :	
Address:		
City:	Postal Code:	



# Current Context and Selected Trends

### A Profile of Apprenticeship and Industry Training in Alberta

October 1996



Alberta Apprenticeship Excellence Through Training and Experience



APPRENTICESHIP AND INDUSTRY TRAINING BOARD ADVANCED EDUCATION AND



### **Table of Contents**

#### Introduction

Purpose of this Background Paper

#### **Current Context**

#### 1 The Structure of Apprenticeship and Industry Training in Alberta

- 1.1 Apprenticeship and Industry Training: Part of Alberta's Adult Learning System
- 1.2 Legislation and Responsibilities
- 1.3 Designation of Trades and Occupations

### 2 Apprenticeship and Industry Training: Enrollment and Industry Participation

- 2.1 Apprenticeship Registration, New Enrollments and Course Completions
- 2.2 Apprentices' Age and Gender Profile
- 2.3 Apprenticeship Training: The Formal Instruction Component
- 2.4 Occupational Training
- 2.5 Industry Participation

### 3 Alberta's Contribution to Apprenticeship Training and the Red Seal Program

- 3.1 Alberta's Contribution to Apprenticeship Training in Canada
- 3.2 The Interprovincial Standards (Red Seal) Program

#### 4 Funding Apprenticeship and Industry Training

- 4.1 Provincial Funding of Apprenticeship and Industry Training
- 4.2 Federal Funding of Apprenticeship and Industry Training
- 4.3 Industry Contributions
- 4.4 Apprentice and Trainee Contributions

#### 5 The Emerging Economic Environment and Skill Requirements

#### **6** Recent Government Initiatives

- 6.1 The Agreement on Internal Trade
- 6.2 Regulatory Reform
- 6.3 The Need to Ensure Accountability

#### **Selected Trends**

- Apprenticeship Registrations
- Forecast Alberta Population Growth
- Demand for Post Secondary Education



35 i

### **List of Charts**

- 1 Adult Participation in Programs and Courses: Alberta and Canada, 1992
- Total and New Apprenticeship Registrations and Employed Labour Force, Alberta, 1989 to 1995
- 3 Trades and Occupations by Designation Status, Alberta, 1996
- 4 Total Apprenticeship Registrations by Trade, 1989 to 1995
- 5 Age Profile of First Time Apprentices, Alberta, 1995
- 6 Apprenticeship Participation by Number of Trades People, Alberta, 1996
- 7 Allocation of Apprenticeship Expenditures, Alberta, 1995
- 8 Expenditures on Apprenticeship, Alberta, 1989-90 to 1994-95
- 9 Federal Transfers for Labour Force Training, Alberta, 1991-92 to 1995-96
- 10 Registered Apprentices, Alberta, 1946 to 1995
- 11 18-24 Year Olds, Alberta, 1971 to 2016
- 12 New Demand for Post-Secondary Education, Alberta, 1991-92 to 2011-12

#### **Definition of Terms**

- Trade
- Compulsory Certification Trade
- Optional Certification Trade
- Apprentice
- Designated Occupation
- Trainee

## **Suggested Other Reading**

- Alberta's Apprenticeship System: A Model of Excellence
- Alberta Apprenticeship and Industry Training Board: 1994-95 Annual Report



## Introduction

This paper provides background material for a discussion of issues important to apprenticeship and industry training in Alberta.

The current environment for apprenticeship and industry training is significantly different than it was even five years ago. Alberta's economy has undergone many changes such as rapid technological development in many industries, globalization and pressures on limited private and public resources. At the same time, there have been new initiatives to encourage interprovincial trade and labour mobility, to remove unnecessary regulation and to improve international competitiveness.

Alberta's apprenticeship and industry training system needs to respond to emerging economic and social influences and opportunities. These influences include:

- anticipated above-average economic growth in some industries, combined with aging of the current skilled workforce, which is forecast to sharply increase industry needs for skilled workers. Industry and government need to prepare to meet those needs.
- public priorities that continue to focus on reducing the provincial deficit and debt. Programs and services are being eliminated, scaled down or privatized and administration streamlined. Federal transfers to support labour market training are being eliminated and income support to apprentices reviewed. We need to find ways to support apprenticeship and industry training in an environment of ongoing change. We need to reduce program and administrative costs and continuously achieve productivity gains.
- rapid changes in technology that require workers to more frequently retrain and upgrade their skills. Training approaches and system supports need to adapt to efficiently balance work commitments and retraining requirements.

These economic and social influences, and others, will create challenges and opportunities in Alberta's apprenticeship and industry training system. Forthcoming discussions with Albertans will address these issues. This background paper is provided to assist those discussions.



## The Current Context

## 1 The Structure of Apprenticeship and Industry Training in Alberta

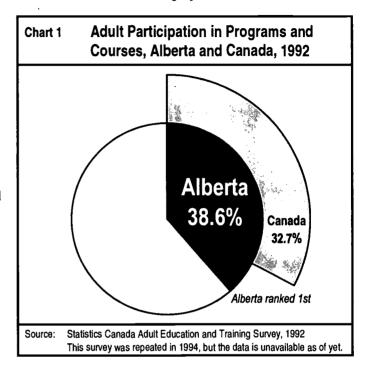
## 1.1 Apprenticeship and Industry Training: Part of Alberta's Adult Learning System

Alberta's adult learning system is comprised of learners, industry, institutions and government — acting together to develop labour force skills and knowledge.

Approximately 40% of adult Albertans participate in adult learning programs or courses each year. This participation rate is higher than that of any other province (Chart 1).

Alberta has more than two dozen colleges and universities, technical institutes and specialized schools of training. Some of these institutions deliver the broad range of programs for the formal training components of apprenticeship and occupational training.

There is increasing demand by both employers and workers for programs leading to skills certification and upgrading. Apprenticeship registrations increased by



12% between 1989 and 1995. This is higher than the 9% growth in overall labour force employment (Chart 2). This increased demand for skilled labour reflects industry interest in consistent workforce training and worker interest in attaining competencies and greater job mobility.

Chart 2 Total and New Ap 1989 to 1995	prentice	ship Reg	istrations	s and Em	ployed L	abour Fo	orce, Alb	erta,
	1989	1990	1991	1992	1993	1994	1995	1989-95 % Change
Total Apprenticeship Registrations (all trades)	20,950	22,574	22,051	21,811	21,383	21,546	23,407	12%
New Apprenticeship Registrations (all trades)	7,583	8,043	6,162	5,438	6,002	7,264	7,973	5%
Overall Labour Force Employment (thousands)	1,254	1,277	1,290	1,285	1,296	1,337	1,373	9%



#### 1.2 Legislation and Responsibilities

Alberta's Apprenticeship and Industry Training Act is the governing legislation for apprenticeship and industry training in the province. The Act establishes the Alberta Apprenticeship and Industry Training Board (the Board) as the body responsible for advising the Minister of Advanced Education and Career Development on Alberta's need for skilled labour and on the training required for certification in a trade or occupation.

Employers, employees, training institutions and government all have roles in the apprenticeship and industry training system. Industry plays the lead role by identifying the need for training programs. Industry also ensures that the course outlines and standards for their training programs are current. Provincial Apprenticeship Committees and Occupational Training Committees, comprised of equal representation from employers and employees, are responsible for advising the Board on the training standards for their trade or occupation, respectively. Most trades also have Local Apprenticeship Committees to address local issues.

The Department of Advanced Education and Career Development works with the Board and Provincial Apprenticeship Committees to develop the training standards. Department staff also administer the apprenticeship program by keeping a record of apprentices' contracts and training progress. Apart from certification, the Department provides limited administrative support to designated occupations.

## 1.3 Designation of Trades and Occupations

Designation as a trade occurs only with the approval of the Lieutenant Governor in Council, following the recommendation of the Minister of Advanced Education and Career Development. Trades may be designated as either a compulsory certification or an optional certification trade (Chart 3). Where there are significant issues of worker or public safety, the trade may be designated as requiring compulsory certification.<sup>1</sup>

The Minister may also, by regulation, designate an occupation. The Board prescribes the standards and training required to obtain certification. Training and certification are not compulsory in designated occupations. Two occupations, Gas Utility Operator and Plasterer, were designated in 1995.

The designation process, whether for a trade or an occupation, is normally initiated by industry identifying a need for a training program. Designation is a lengthy process. This is because there are numerous issues to address including industry standards, training and certification requirements, industry support and public and worker safety considerations. A public hearing is a legislated requirement prior to designating a trade as a compulsory certification trade or redesignating an optional certification trade as a compulsory certification trade.

See Definition of Terms, at the end of this paper, for definitions of compulsory certification vs. optional certification trades, etc.



Trade Name	Certification	Red Seal*	Trade Name	Certification	Red Seal
Agricultural Mechanic	Optional	<b>✓</b>	Landscape Gardener	Optional	
Appliance Serviceman	Compulsory	<b>✓</b>	Lather-Interior Systems Mechanic	Optional	<b>/</b>
Auto Body Technician	Compulsory	<b>✓</b>	Locksmith	Optional	
Automotive Service Technician	Compulsory	<b>✓</b>	Machinist	Optional	<b>✓</b>
Baker	Optional	✓	Millwright	Optional	<b>/</b>
Boilermaker	Compulsory	<b>✓</b>	Motorcycle Mechanic	Compulsory	_
Bricklayer	Optional	<b>✓</b>	Painter & Decorator	Optional	1
Cabinetmaker	Optional	<b>✓</b>	Partsman	Optional	1
Carpenter	Optional	<b>✓</b>	Plumber	Compulsory	<b>/</b>
Communication Electrician	Optional		Power Lineman	Optional	<b>/</b>
Concrete Finisher	Optional	<b>✓</b>	Power System Electrician	Optional	
Cook	Optional	<b>✓</b>	Printing & Graphic Arts Craftsman	Optional	
Crane & Hoisting Equipment Operator	Compulsory	<b>/</b>	Recreation Vehicle Mechanic	Compulsory	
Electrical Rewind Mechanic	Optional	<b>✓</b>	Refrigeration & Air Conditioning Mechanic	Compulsory	<b>/</b>
Electrician	Compulsory	<b>✓</b>	Roofer	Optional	<b>✓</b>
Electronic Technician	Compulsory	<b>✓</b>	Sawfiler	Optional	
Elevator Constructor	Compulsory		Sheet Metal Worker	Compulsory	<b>✓</b>
Floorcovering Installer	Optional	<b>√</b>	Sprinkler System Installer	Optional	<b>✓</b>
Gasfitter	Compulsory		Steamfitter-Pipefitter	Compulsory	<b>✓</b>
Glassworker	Optional	✓	Structural Steel & Plate Fitter	Optional	<b>✓</b>
Hairstylist	Compulsory	<b>√</b>	Tilesetter	Optional	
Heavy Equipment Technician	Compulsory	<b>✓</b>	Tool & Die Maker	Optional	<b>✓</b>
Instrument Mechanic	Optional	<b>✓</b>	Transport Refrigeration Mechanic	Optional	
Insulator	Optional	<b>√</b>	Water Well Driller	Optional	
Ironworker	Compulsory	<b>✓</b>	Welder	Compulsory	<b>✓</b>

<sup>\*</sup> Interprovincial Standards Red Seal Trade.

Training Act.

## 2 Apprenticeship and Industry Training: Enrollment and Industry Participation

## 2.1 Apprenticeship Registration, New Enrollments and Course Completions

Depending on the trade, apprenticeship training in one of Alberta's 50 designated trades typically takes 3 or 4 years. An apprenticeship program begins with an employer's agreement to hire an apprentice and to provide a supervising tradesperson.<sup>2</sup> On-the-job training and experience is the largest component of an apprentice's training. On average, time spent in work-site training and experience comprises 80% of an apprenticeship, with the remaining 20% being formal instruction at an institution.

For the 50 trades<sup>3</sup>, apprenticeship registrations totalled 23,407 in December 1995, an 8.6% increase over 1994. New enrollments/registrations across all trades were 7,973, an increase of nearly 10% from 1994.

In 1995, there were five trades with more than 1,500 registered apprentices: Electrician, Welder, Auto Service Technician, Heavy Equipment Technician and Carpenter. Eleven trades had more than 500 registered apprentices and four trades had fewer than 40 registered apprentices (Chart 4).

At present there is no apprenticeship training for the Tool and Die-Maker trade.



4

)

Totals: 19 Compulsory Certification Trades, 31 Optional Certification Trades, 38 Red Seat Trades.

Note: Gas Utility Operator, Plasterer and Warehousing are Designated Occupations under Section 36 of the Alberta Apprenticeship and Industry

Information on how an individual becomes an apprentice, progresses through work experience and formal instruction and qualifies for an Alberta certificate is included in a department publication: Alberta's Apprenticeship System: A Model of Excellence.

	1000	4000	4004	4000	4000	4004	4005	1989-95	1989-95
	1989	1990	1991	1992	1993	1994	1995	Average	% Change
Total	20,950	22,574	22,051	21,811	21,383	21,482	23,306	21,937	11%
Agricultural Mechanic	49	68	50	38	55	70	97	61	98%
Appliance Serviceman	74	81	77	82	79	99	95	84	28%
Autobody Technician	907	841	719	671	585	512	525	680	-42%
Automotive Service Technician	2,707	2,641	2,413	2,271	2,108	1,914	1,922	2,282	-29%
Baker	215	220	209	207	208	240	267	224	24%
Boilermaker	90	102	99	104	116	98	94	100	4%
Bricklayer	87	100	90	83	84	77	_ 83	86	-5%
Cabinetmaker	405	424	403	385	376	361	379	390	-6%
Carpenter	1,634	1,844	1,814	1,863	1,828	1,719	1,695	1,771	4%
Communications Electrician	77	110	113	124	99	88	110	103	43%
Concrete Finisher	24	15	10	4	4	53	83	28	246%
Cook	1,023	1,067	1,010	930	998	986	1,085	1,014	6%
Crane & Hoisting Equipment Operator	79	113	124	135	172	371	530	218	571%
Electrical Rewind Mechanic	48	56	58	5 <u>9</u>	59	49	50	54	4%
Electrician	2,381	2,774	2,801	2,873	2,805	2,796	2,748	2,740	15%
Electronics Technician	167	158	143	132	129	118	105	136	-37%
Floorcovering Installer	82	82	84	75	77	73	80	79	-2%
Gasfitter	105	130	151	145	144	149	182	144	73%
Glassworker	141	148	136	139	116	100	102	126	-28%
Hairstylist *	1,236	1,166	975	1,074	1,132	1,175	1,347	1,158	9%
Heavy Equipment Technician	1,546	1,656	1,622	1,538	1,424	1,481	1,756	1,575	14%
Instrument Mechanic	645	783	917	1,000	988	940_	890	880	38%
Insulator	168	199	213	244	300	274	270	238	61%
Ironworker	52	70	58	66	80	72	244	92	369%
Landscape Gardener	297	312	307	306	315	286	300	303	1%
Lather/Interior Systems Mechanic	41	63	62	58	49	53	63	56	54%
Machinist	477	460	436	402	362	428	535	443	12%
Millwright	682	786	798	803	736	767	870	777	28%
Motorcycle Mechanic	65	60	70	68	72	76	86	71	32%
Painter & Decorator	157	171	154	119	150	152	159	152	1%
Partsman	741	720	642	564	491	460	500	588	-33%
Plumber	827	1,027	1,083	1,196	1,230	1,155	1,110	1,090	34%
Power Lineman	151	192	225	241	206	146_	120	183	-21%
Power System Electrician	49	96	116	85	62	48	41	71	-16%
Printing & Graphic Arts Craftsman	364	325	269	229	184	151	127	236	-65%
Recreation Vehicle Mechanic	80	89	65	55	67	78	72	72	-10%
Refrigeration & Air Conditioning Mechanic	264	273	283	277	300	309	314	289	19%
Roofer	66	78	75	90	106	105	118	91	79%
Sawfiler	34	31	28	21	20	30	36	29	6%
Sheet Metal Worker	460	536	520	517	553	500	524	516	14%
Sprinkler Systems Installer	65	88	79	86	92	98	97	86	49%
Steamfitter - Pipefitter	333	384	471	519	554	646	718	518	116%
Structural Steel & Plate	58	68	73	70	69	84	112	76	93%
Tilesetter	52	61	48	44	34	35	33	44	-37%
Transport Refrigeration Mechanic	22	22	16	16	19	27	35	22	59%
Water Well Driller	60	45	39	34	32	31	37	40	-38%
Welder	1,663	1,839	1,903	1,769	1,714	2,002	2,560	1,921	54%

Does not include statistics for Tool and Die Maker, Elevator Constuctor and Locksmith. Hairstylist statistics include total of Barber and Beautician registrations from 1989 to 1991.



The first step for a potential apprentice is finding initial employment and an employer willing to sign a contract of apprenticeship. Once employed and having completed an initial period of formal instruction, the apprentice will likely complete the apprenticeship program. In any year, 5.6% of apprentices who have attended at least one period of formal instruction drop out. This compares to an overall apprenticeship drop out rate of 13% per year for apprentices with some on-the-job training, but who have never participated in formal instruction. In 1995, approximately 4,200 apprentices completed their programs and received Alberta Journeyman Certificates in their trades.

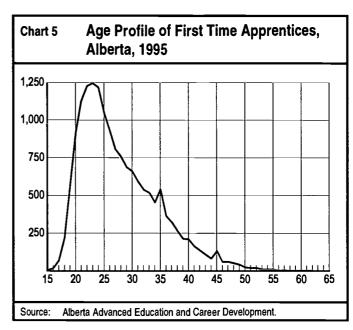
Government and industry have been working together to familiarize high school students with career opportunities in the trades. The Registered Apprenticeship Program (RAP) was introduced in 1991. The program allows high school students to simultaneously work on a high school diploma and satisfy the requirement for their first year of apprenticeship. More than 260 youth have participated in RAP since 1991. Of these 260 students, 110 have now graduated from high school and are full time apprentices.

Other initiatives targeted to high school students include: the Experiential Learning and Instruction for Trade Entry (ELITE) program in Grande Cache (where it is possible to earn credit toward the first period of apprenticeship) and the Department of Education's Career and Technology Studies (CTS) program which encourages development of basic technology skills at the high school level. Careers... The Next Generation is a more recent initiative, sponsored by the Alberta Chamber of Resources in partnership with government and several associations, which seeks to increase enrollment in such programs as RAP and CTS by encouraging employers to create work positions for students in their geographic area.<sup>4</sup>

### 2.2 Apprentices' Age and Gender Profile

More apprentices begin their first apprenticeship program at age 22 than at any other age (Chart 5). The average age of an apprentice, however, is higher at 29 years. The high average indicates that apprenticeship is accessible to individuals of all ages, but it also partly reflects that new registrants may already have spent time in an occupation or served an apprenticeship in another trade. In 1995, 11% of registered apprentices were trades people already certified in another trade.

In the summer of 1995, a survey of 1,200 Edmonton area high school students found that 99% expected to undertake some form of post-secondary education, but only 9% were contemplating apprenticeship.<sup>5</sup> Female respondents, in particular, indicated little



Draft report Perceptions of Work and Further Education by High School Students, a 1995 survey funded by Advanced Education and Career Development.



<sup>4</sup> Careers... the Next Generation is a partnership among various industry, employer and school associations and the local, provincial and federal governments.

interest in apprenticeship, consistent with the continuing under-representation of women in the trades. Approximately 8.5% of apprentices are women and they are concentrated in the Hairstylist, Cook, Baker, Partsman and Landscape Gardener trades.

## 2.3 Apprenticeship Training: The Formal Instruction Component

In the 1995-96 school year, 12,381 of Alberta's 23,407 registered apprentices attended a period of formal instruction. For the 1996-97 school year, over 13,600 are expected to attend formal instruction. In any year, approximately 50-60% of apprentices take a period of formal instruction, primarily determined by where individuals are at in their apprenticeship program.

The formal instruction component is taken at a training institution, usually in an 8 week block each year (although program blocks vary from 3 to 12 weeks). Nearly all apprentices will take their formal instruction at one of Alberta's technical institutes or community colleges, although a few private companies have been accredited to provide formal instruction. An agreement with British Columbia allows Alberta apprentice Sawfilers to undertake training at the British Columbia Institute of Technology.

In all trades, industry determines what needs to be taught in the formal instruction component of training. A course outline is developed for each trade by its Provincial Apprenticeship Committee and approved by the Board.

Beginning in 1988-89, the Department initiated a Competency-Based Apprenticeship Training (CBAT) pilot program for the Carpenter, Electrician and Welder trades. The program explored the possibilities for individually-paced, modularized apprenticeship training, rather than time-specific classroom instruction. The pilot program has been evaluated and industry, the Department and the federal government have indicated support to expand this type of formal instruction.

Other initiatives adding flexibility to apprenticeship training include the Weekly Apprenticeship Training (WAT) program for the Cook trade, where the apprentice takes formal training for a day per week rather than the usual 8-week block. The WAT approach is now also available for the Baker trade. In 1994, a distance learning program for apprentice Electricians began to be offered through the Northern Alberta Institute of Technology.

### 2.4 Occupational Training

Training programs for occupations leading to an Occupational Certificate may include formal instruction or work experience or a combination of both. Provisional Committees, comprised of employers and employees who are knowledgeable about the proposed occupation, make recommendations to the Board about the following: job competencies, training requirements and standards of performance appropriate to the proposed designated occupation. Provisional Committees are funded by industry, with secretariat support provided by the Department.

At industry's request, the occupations of Gas Utility Operator and Plasterer were designated by the Minister of Advanced Education and Career Development in 1995. Warehousing was designated in 1996. The Board approved the standards and training recommended by the Provisional Committees for certification in these occupations. Training and certification are not compulsory. In 1995, 38 Gas Utility Operators received Occupational Certificates.

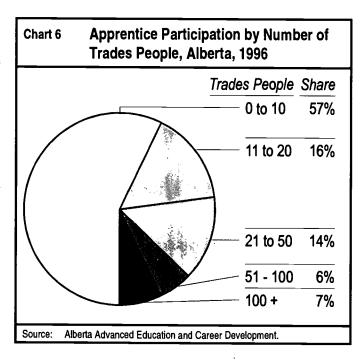
Other industries are in the process of making recommendations to the Minister for designation of occupations in their industry: Construction Craft Labourer is a current example.



## 2.5 Industry Participation

Apprenticeship training in Alberta is concentrated in construction (approx. 40%), manufacturing (24%) and retail and wholesale trades (23%), using the Standard Industrial Classification (SIC) codes for industries. Fewer apprentices are employed in food, accommodation, beverage and personal services (11%) and in utilities and communication (2%). The SIC construction category includes Electricians, Carpenters and others; manufacturing includes Cabinetmakers, Instrument Mechanics and others; and the retail and wholesale trade includes Automotive Service Technicians, Heavy Equipment Technicians and others.

Most apprentices train in small Alberta firms. Alberta firms employing 10 or fewer trades people train about 57% of all apprentices (Chart 6).



## 3 Alberta's Contribution to Apprenticeship Training and the Red Seal Program

## 3.1 Alberta's Contribution to Apprenticeship Training in Canada

Alberta is a leader in workforce training in Canada. Alberta industry is a strong supporter and partner in apprenticeship training. On a per capita basis, the participation rate is the highest in Canada. Through interprovincial agreements, Alberta also provides formal instruction for apprentices registered in other Canadian jurisdictions where the enrollment rates are low or where certain trades are not designated. In 1995, 312 apprentices from other jurisdictions took formal training in Alberta.

### 3.2 The Interprovincial Standards (Red Seal) Program

There are 43 trades in Canada in which it is possible to write interprovincial examinations and obtain a "Red Seal" designation (the Interprovincial Standards Program). Thirty-eight of the 43 Red Seal trades are available in Alberta (Chart 3). Ninety-three percent of all apprentices in Alberta work in trades that are designated Red Seal trades. Having a Red Seal designation provides skilled workers with the flexibility to obtain employment in different provinces and territories. Having certified trades people with Red Seals enables employers to bid on work in other provinces.

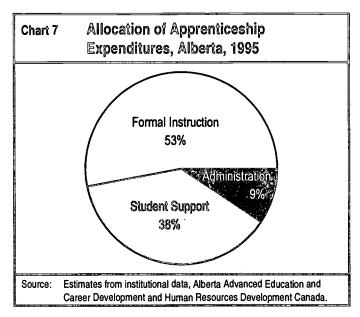
Designating a trade as a Red Seal trade is done in conjunction with other provinces and territories through the work of the Canadian Council of Directors of Apprenticeship. The federal government assists in this process by providing funding for both national occupational analyses and printing and distribution of interprovincial examinations. Usually, six or more provinces or territories will have designated the trade before an interprovincial designation is initiated.



## 4 Funding Apprenticeship and Industry Training

Apprenticeship and industry training is funded by industry, the provincial and federal governments and apprentices and trainees. Government support for apprenticeship, totalling approximately \$83 million in 1995, is provided through support of institutional costs for formal instruction, income support to students and administrative costs of operating the system (Chart 7).

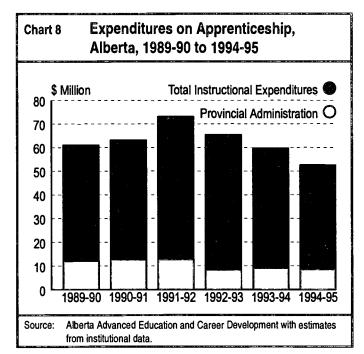
The cost of formal instruction varies greatly among the trades, reflecting the facilities and equipment required and the number of periods and length of formal instruction required. Beginning in 1997, institutions will report the cost of training an apprentice and other post secondary students as part of their key performance indicators.



## 4.1 Provincial Funding of Apprenticeship and Industry Training

The province supports apprenticeship training through funding of the industry advisory network and through administrative support for field delivery, the setting of standards, advice on labour market issues, the development of course outlines, examinations and accreditation. The province also supports apprenticeship training indirectly, as part of its wider support of all post secondary education in Alberta.

Chart 8 illustrates approximate provincial funding of apprenticeship between 1990 and 1995, indicating instructional expenditures and administrative costs. The decline in funding reflects institutions moving unused apprenticeship capacity to other programming and the 11% reduction in provincial grants to institutions in 1994-95. The province uses federal transfers to partially offset instructional costs. As federal transfers have



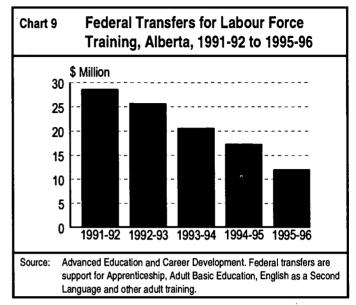
been decreasing (see 4.2), a greater portion of instructional costs have been picked up by the province.

Instructional expenditures reflect approximate per student per diems and actual provincial attendance.



### 4.2 Federal Funding of Apprenticeship and Industry Training

For several years, the federal government has provided an intergovernmental transfer to the provinces to support labour force training. These funds have been used by Alberta to help offset the costs of the classroom portion of training for a number of adult learning programs, including apprenticeship. In 1995-96, the federal government transferred \$11.9 million to Alberta. The province, in turn, provided institutions with a grant of \$125 per apprentice, in lieu of their tuition, and supported the classroom portion of the training. The federal transfer has been steadily declining in recent years: the 1995-96 transfer was approximately 40% of the 1991-92 transfer of \$28.5 million (Chart 9).



Separate from the intergovernmental transfer,

in 1995-96 the federal government provided income support to apprentices for their institutional training through unemployment insurance (approximately \$23 million in 1995-96), training allowances (\$4.0 million) and supplementary allowances for child care, travel and living away from home (\$3.1 million). These amounts totalled approximately \$30.1 million in 1995-96.

#### Announced Reductions in Federal Support

In the Prime Minister's November 27, 1995 statement on national unity, the Employment Insurance legislation introduced on December 1, 1995 and the February 27, 1996 Speech from the Throne, the federal government has announced its intention to withdraw from the purchase and support of training, including apprenticeship training. Training allowances for apprentices were eliminated on April 1, 1996 and the federal government has indicated that the \$11.9 million in transfers will be phased out over a maximum of three years beginning April 1, 1996.

Measures are being taken to ensure that potential apprentices are not financially prevented from participating in apprenticeship. The province has established an interim initiative with the federal government under which apprentices may apply for student financial assistance that supplements their employment insurance benefits. This assistance will normally be issued as student loans; in exceptional circumstances, grants may be provided. The costs of the initiative will be borne by the federal government. The interim assistance is available to apprentices who enter formal training between August 26, 1996 and January 30, 1997. The experience gained from this initiative will be integrated into the design and implementation of a future Skills, Loans and Grants program that will be part of the new federal-provincial labour market arrangements.



#### 4.3 Industry Contributions

Employers provide support to apprenticeship training through wage payments to apprentices and, in some cases, through provision of tools and equipment needed during work-site training. Wages paid to apprentices are an increasing percentage, according to the period of apprenticeship, of the amount the employer would pay to a certified tradesperson. By providing a supervising tradesperson, employers also incur some loss of productivity of that tradesperson and may incur additional costs arising from an apprentice's inexperience. Industry also donates equipment and technology to institutions to enhance the formal instruction component of apprentices' training programs.

Industry invests resources in the apprenticeship and industry training process, long before any training occurs. In preparation for recommending designation of a trade or occupation, work and costs are incurred in undertaking occupational analyses of the competencies required in the trade or occupation. More costs are incurred in preparing the course outline and in ensuring there will be continuing industry support, through the committee structures, once the trade or occupation is designated.

## 4.4 Apprentice and Trainee Contributions

Apprentices and individuals in occupational training contribute to the cost of their training through the purchase of books, tools and other training related expenses. Formal instruction is currently tuition-free for apprentices, with tuition costs being paid by public funds. Individuals pursuing certification in an occupation are financially responsible for their course costs, but may receive assistance from their employer.

Beginning in the 1997-98 school year, tuition fees will be required of apprentices. There will likely be phased tuition increases until such time as fees are on par with those for other technical programs. Ultimately, the setting of tuition fees will be established by institutions as they are for other programs. The new tuition policy will be developed following consultation with industry, institutions and apprentices.<sup>8</sup>

## 5 The Emerging Economic Environment and Skill Requirements

In 1995, Alberta recorded the second highest employment growth rate (2.7%) of all provinces. According to the *Canadian Occupational Projection System*, Alberta's employment growth rate is forecast to continue its upward trend, averaging 2.3% from the year 1995 to the year 2000, then falling to under 2.0% until the year 2005. If attrition of existing workers is considered, the annual rate of job openings to the year 2000 is expected to increase to 3.7%.

Rapid technological development and increased global trade and competition are changing the skill requirements of Alberta's workforce. Advancements in the variety and quality of products, new materials and different technologies require both the continued upgrading of existing skills and the ability to acquire new skills for entirely new processes.

The Canadian Occupational Projection System uses occupational categories which are not fully compatible with trade designations, so that projections of employment growth can only be taken as approximations.



A Canada-Alberta Study on Apprenticeship Training, July 1987, indicated that employers contribute 64% of the total costs of apprenticeship, both orders of government 27% and apprentices 9%. The employer's 64% is primarily wages, which represents both payment for a service and a contribution to training. Without undertaking costly research, it is not possible to estimate the present percentage contribution of the stakeholders.

Nova Scotia introduced apprenticeship tuition fees in 1994-95, followed by New Brunswick on January 1, 1996. Other jurisdictions are also considering tuition fees.

#### 6 Recent Government Initiatives

### 6.1 The Agreement on Internal Trade

In July 1994, all Canadian governments signed the Agreement on Internal Trade. Chapter 7 of the Agreement establishes improved labour mobility within Canada as a goal of all governments. Jurisdictions are committed to developing processes for mutual recognition of employment standards and occupational qualifications and to ensure that licensing, certification and registration requirements are based on competency. The process to obtain certification in a trade must be transparent, residency requirements are prohibited and time-certain dispute resolution processes are to be developed and implemented.

Meeting the provisions of the Agreement on Internal Trade will require some change in Alberta's certification system. <sup>10</sup> Competencies acquired in other jurisdictions by training other than apprenticeship will need to be recognized. The Alberta Apprenticeship and Industry Training Board has developed a program for the assessment and recognition of competencies attained in other jurisdictions. Further work with the Provincial Apprenticeship Committees will be needed.

#### 6.2 Regulatory Reform

The Government of Alberta has initiated a review of all government regulations, scheduled to take place over the next three years. The purpose is to reduce and eliminate duplication and to lessen government regulation and involvement in a number of areas. The legislative framework of Alberta's apprenticeship training system is included in this review. The review will include an in-depth assessment of the regulations that govern apprenticeship and industry training.

## 6.3 The Need to Ensure Accountability

To ensure accountability to the taxpayer, the Government of Alberta now requires that all boards, agencies and departments establish performance indicators. The Alberta Apprenticeship and Industry Training Board and the Department of Advanced Education and Career Development have established the following initial performance indicators for Alberta's apprenticeship and industry training system:

- cost per adult learner (apprentice)
- cost per graduate (journeyman)
- training completion rate

- employer satisfaction
- apprentice satisfaction
- apprenticeship responsiveness to the needs of the Alberta economy.

Beginning in 1997-98, results for some of the above performance indicators will be published by the Board and the Department of Advanced Education and Career Development.

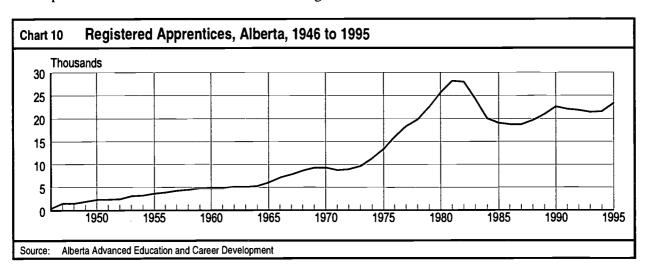
<sup>10</sup> The Apprenticeship and Industry Training Act was amended to accommodate the requirements of the Agreement.



## **Selected Trends**

## **Apprenticeship Registrations**

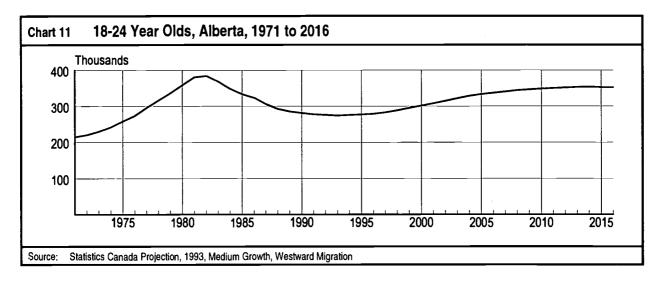
Chart 10 indicates the growth in apprenticeship registrations over the past 50 years. The increased registrations reflect a number of factors, including population growth, economic growth, technological development and the increase in the number of designated trades.



## **Forecast Alberta Population Growth**

Chart 11 illustrates population levels for the 18-24 year old age group since 1971 and projected levels to the year 2016. In 1995, there were an estimated 277,000 Albertans in this age group. This number is forecast to grow to 333,000 by the year 2005 and to 352,000 by the year 2016.

As a percentage of the total forecast Alberta population, the 18-24 age group is expected to increase slightly from approximately 10.0 % in 1995 to 10.3 % by the year 2005, but then fall to 9.3 % by the year 2016.



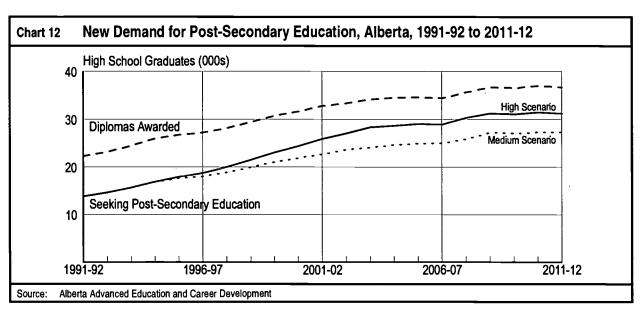
49



## **Demand for Post-Secondary Education**

By the year 2000, there could be 22,000 to 24,000 high school graduates seeking entrance to all types of post secondary study, compared to 18,000 in 1995. By 2005, there could be 25,000 to 29,000 high school graduates seeking post secondary study. Chart 12 illustrates two possible forecasts of demand for post-secondary education.

While most first-time apprentices will be drawn from the 18-24 year age group, the school-to-work transition is no longer a one-time occurrence. Increasingly, older individuals are seeking retraining and upgrading. As a result, an increasing proportion of Albertans in the older age groups may also seek technical training opportunities to build on existing knowledge and skills.





## **Definition of Terms**

A Trade is an occupation designated by the Lieutenant Governor in Council, pursuant to the Apprenticeship and Industry Training Act and on the recommendation of the specific industry, the Minister of Advanced Education and Career Development, and the Alberta Apprenticeship and Industry Training Board. A trade may be either a compulsory certification trade or an optional certification trade. A trade has established job skills and competencies and an established training program. When an individual achieves the standards of performance and fulfills the training established for the trade, the Minister grants a Journeyman Certificate to the apprentice.

An individual wishing to work in a Compulsory Certification Trade is required by legislation to hold a trade certificate or be a registered apprentice in the trade. An employer wishing to hire persons to work in the trade must hire only qualified journeymen in that trade or individuals who are registered apprentices in the trade. If an employer hires an apprentice, the employer must provide a supervising journeyman. The employer must also provide the apprentice with appropriate training for the trade, be prepared to release the apprentice for periods of formal instruction, maintain a record book and pay wages to the apprentice in accordance with the regulations for that trade. Trades designated as requiring compulsory certification usually involve work where public and worker safety are important.

An individual is permitted to work in an **Optional Certification Trade** if he or she has the skills and knowledge expected of a certified journeyman in the trade. There is no requirement to hold a certificate in the trade. Employers may employ uncertified journeymen and use uncertified journeymen to supervise and train apprentices on the job. When an employer is training employees in an optional certification trade, a contract of apprenticeship is required.

An **Apprentice** is an individual who has met the requirements to enter the apprenticeship program for a trade. The individual has contracted with an employer to apprentice in a trade and has had the contract registered with the Department of Advanced Education and Career Development.

A **Designated Occupation** is an occupation that has been approved by the Minister of Advanced Education and Career Development, under the *Apprenticeship and Industry Training Act*, on the recommendation of the specific industry and the Alberta Apprenticeship and Industry Training Board. Designated occupations have established job skills and competencies and an established training program. When a trainee achieves the standards of performance for the designated occupation, the Minister grants an Occupational Certificate to the trainee. The certificate is recognized throughout the province as an achievement of competency for that occupation. Participation in a designated occupation is voluntary and a certificate is not required for an individual to work or train in the occupation.

A Trainee is an individual who is pursuing training in a designated occupation.



## THIS PAGE INTENTIONALLY LEFT BLANK



## keeping you informed.

# A Vision for the Future

Responses to a discussion paper from the

Alberta Apprenticeship and Industry
Training Board

and the

Alberta Apprenticeship and Industry Training Division

**MARCH 1997** 

## What's Inside...

Consultation Process	1
Vision and Principles	2
Goal: Responsiveness	Ę
Goal: Accessibility	10
Goal: Affordability	14
Goal: Accountability	18
Next Steps	19
Appendix	20
Summary Facts on	
Apprenticeship and	

Industry Training in Alberta





## A Letter to Readers

In early 1996, the Alberta Apprenticeship and Industry Training Board and the Department of Advanced Education and Career Development committed to jointly undertake a public consultation process leading to a renewed vision for apprenticeship and industry training in Alberta. Since Alberta has an established and excellent system of apprenticeship and industry training already in place, the consultations were not aimed at replacing or radically altering the system, but at seeking Albertans' views on what enhancements might be explored.

Keeping You Informed is a report to stakeholders on the public consultations. This paper consolidates the messages that stakeholders conveyed to the Board and the Department in response to the October 1996 discussion paper A Vision for the Future.

This document is not the end of the process. The Board and the Department will now consider and use the advice obtained from the consultations to prepare recommendations to the Minister of Advanced Education and Career Development. Each idea offered during the consultations will be carefully considered. While every idea may not be adopted, the Board and the Department expect to use many of them as a foundation for advising the Minister on the vision, goals, and strategies which should underlie a renewed provincial apprenticeship and industry training system.

The Board and the Department express sincere thanks to all who participated in the consultation process. We appreciate the time you took to either participate in a focus group, participate in the Minister's Forum on Adult Learning, prepare detailed written recommendations on particular matters, or respond to A Vision for the Future. The many thoughtful responses and suggestions that have been offered are clear evidence of Albertans' continuing strong commitment to their apprenticeship and industry training system.

Jake Thygesen

Chairman

Alberta Apprenticeship and Industry Training Board

Shirley Dul

**Executive Director** 

Apprenticeship and Industry Training

Advanced Education and

Career Development



## **The Consultation Process**

In early 1996, the Alberta Apprenticeship and Industry Training Board and the Department of Advanced Education and Career Development agreed to jointly initiate consultations with industry and other stakeholders on Alberta's apprenticeship and industry training system and its ability to continue to respond effectively to the needs of individuals, industry and society.

Focus groups were held in Edmonton and Calgary during the late spring and early summer of 1996. These focus groups identified issues which employers, employees (including journeymen and apprentices), employer associations, employee associations, and training institutions thought should be addressed in province-wide public consultations.

In October 1996, the Board and the Department released a discussion paper A Vision for the Future, and a companion background document Current Context and Selected Trends. Copies of these papers were distributed or made available to individuals and associations across Alberta.

In November 1996, apprenticeship and industry training topics and issues formed part of the agenda for the Minister's Forum on Adult Learning. A wide variety of stakeholders participated in the discussions, and the comments from the Minister's Forum have been included in *Keeping You Informed*.

By the end of December 1996, approximately 1400 responses to A Vision for the Future had been received. The majority of these responses (85%) were from employers and employees. Journeymen, apprentices, and other workers provided input. Submissions were also received from the post-secondary sector, the K-12 sector, government, and community stakeholders. Several written responses were received from large employer associations and large employee associations, representing hundreds or thousands of individual employers or workers.

Table 1 on the next page provides more information on the various sectors.



**Table 1: RESPONDENTS** 

Employers: Total		505	Training and Education: Total		119
Individual Employers	473		Post Secondary	75	
Employer Associations*	32		K-12	44	
Employees: Total		680	Government: Total		44
Journeymen	355		Community groups, Other: Total		48
Apprentices	176				
Other Workers	90				
Employee Associations*	59		TOTAL		1396

<sup>\*</sup>Employer associations include such groups as the Construction Owners of Alberta and the Mechanical Contractors Association of Alberta. Employee associations include such groups as the Alberta Building Trades Council and the Alberta Council of the Canadian Federation of Labour.

## Vision and Principles

The discussion paper proposed the following vision for the future of apprenticeship and industry training in Alberta:

#### 1 Vision

Albertans believe that a highly skilled and trained workforce is essential to the economic well-being of the province. They believe that Alberta's apprenticeship and industry training system is a key component of the province's world-class workforce. Albertans want a system that is led by industry, and is based on the apprenticeship model of on-the-job training and work experience combined with formal, technical training. They also want a system that is **responsive** to the needs of individuals and employers, **accessible** to all qualified persons, **affordable** for apprentices and trainees, employers and other taxpayers, and **accountable** for quality results. Albertans believe that the apprenticeship model is the preferred approach to learning for young Albertans moving from school to the workforce, and for adults training in a wide spectrum of industries and occupations.

Albertans expressed considerable support (93%) for the proposed vision. They also suggested some amendments:

- adding that a highly-skilled workforce is essential to social and community well-being, in addition to economic well-being
- clarifying that "individuals" means learners, apprentices or trainees
- stating that industry and government must ensure the system remains affordable



<sup>&</sup>quot;The vision is generally supported." – employer associations, employee associations, and training providers

<sup>&</sup>quot;A highly skilled and trained workforce is the basis of economic well being." – an apprentice plumber

<sup>&</sup>quot;The apprenticeship system has the potential to provide a workforce and a training system capable of growing with and driving economic and technological growth." – a journeyman motor mechanic

 clarifying that the system, while led by industry (employers and employees), includes significant roles and contributions from other stakeholders

Albertans also expressed considerable support (95%) for the proposed goals of apprenticeship and industry training in Alberta.

Table 2: VISION, GOALS AND PRINCIPLES

Respondents	Vision	Goals	Principles
Agree: Total	93%	95%	91 %
Disagree: Total	6%	4%	8 %
No Opinion	1%	1%	1 %

Source: Data represent results from the questionnaire included in "A Vision for the Future". The percentages include questionnaire responses from all groups (employers, employees, learners, training providers, community and government).

The consultation paper proposed the following seven principles to support the above vision, and to form the foundation of the apprenticeship and industry training system of the future.

## 2 Principles

- 1 Albertans who wish to pursue a career in the trades or designated occupations have an opportunity to participate in apprenticeship and industry training.
- 2 Apprentices and trainees in designated occupations have opportunities to acquire the highest possible standards of knowledge and skills to enable them to be successful members of the workforce and industry.
- 3 Apprentices and trainees will make a financial contribution such as tuition fees to the costs of formal instruction, like other post-secondary learners.
- 4 Province and nation-wide industry standards are the foundation of apprenticeship and industry training in Alberta.
- 5 Industry (employers and employees) is responsible for on-the-job training and work experience.
- 6 Apprenticeship and industry training is based on effective partnerships between and among government, industry, and apprentices/trainees.

"I agree that Albertans should have a chance to yrsue a career in the ades, and feel that Alberta is a leader in this field." – a Presiding Officer

"It is crucial to industry to employ a workforce that stays abreast of advancements in technology." – an employee association

"Requiring apprentices to fund their apprenticeship could limit accessibility." – an employee association

"Provincial and international standards must be fostered and maintained."

- a retired construction owner

"Agree...industry is also responsible for determining training criteria and standards" – an employer association

"Communication between all parties is necessary to regulate performance standards and to ensure fair, and equitable treatment of those involved." – an apprentice plumber 7 Government, with advice from industry, has a role in regulating apprenticeship training and the skills and competencies required to work in the trades.

Albertans expressed considerable support (91%) for the seven proposed principles. They also suggested some amendments, including:

- emphasize that individuals must be qualified to participate in apprenticeship (principle 1)
- remove the reference to tuition fees; fees are a strategy, not a principle (principle 3)
- emphasize that it is industry standards, not provincial standards, which are the foundation (principle 4)
- include that industry is also responsible for training criteria and standards (principle 5)
- specify that government should be responsible for monitoring (principles 5,7)
- include the role of the training providers (principle 6)
- make it clear that government either has a lead role, is only a facilitator, or is an equal partner (respondents had different views) in regulating apprenticeship (principle 7).

With the exception of principle 3, all principles received more than 80% support from all respondent groups (employers, employees, training providers, community groups and government). Support for principle 3 was 67% overall. Support for this principle was lowest among apprentices, journeymen and employee associations (50-56%), and highest from individual employers (78%).

The following pages report on the responses provided to the individual strategies proposed in *A Vision for the Future*. Statistical information on the views of employers and employees (including apprentices, journeymen and trainees) is provided in the charts. Employers and employees are the two principal partners of apprenticeship and industry training, and together these two groups comprised 85% of respondents.

"The advisory committee structure must be made more effective and more responsive to those the system is designed to serve." – an employer association

"Strengthen the Provincial Advisory Committees ... but ensure there is a mechanism for voluntary Local Apprenticeship Committees to be established where necessary." – an employee association

"Trade clusters may be inappropriate. Small trades could be dominated by larger trades."

– an employee association

"Cannot see that clusters of trades would lead to more effective results."

- an employer association

## Responsiveness

The Goal.....Alberta's apprenticeship and industry training system will anticipate and meet the skill development needs of individual Albertans and the skilled workforce requirements of Alberta employers.

A Vision for the Future identified five possible strategies for maintaining or improving high levels of responsiveness. Each of the five strategies is discussed below.

## 1 Redesign the advisory committee network

Background: The consultation paper invited Albertans' views on moving to a one-level advisory system in each trade by combining the provincial and local apprenticeship committees in each trade. Views were also sought on whether the advisory system should move toward a trade-cluster structure. Albertans were asked whether industry should have a greater role in nominating advisory committee members.

Some respondents felt that the current advisory committee network could be improved to provide the timely information and the level of involvement sought by stakeholders. The proposals that either mentioned a one-level system or a trade-cluster approach that would help address these issues received moderate agreement (66%).

Table 3: Goal: RESPONSIVENESS

Respondents	One-Level Committee (See #1a)	Trade Clnster Approach (See #1b)	Provide Post- Secondary Recognition (See #2)	Flexible Certification (See #3)	Flexible Formal Instruction (See #4)	Promote Apprenticeship In Occupations (See #5)
Agree: Total	66%	66%	90%	73%	75%	89%
Employer	70%	69%	89%	78%	80%	87%
Employee	65%	63%	91%	67%	71%	88%
Disagree: Total	20%	20%	6%	23%	20%	5%
Employer	20%	19%	7%	17%	16%	6%
Employee	20%	22%	5%	28%	24%	6%
No Opinion	14%	14%	4%	5%	5%	6%

Source: Data represent results from the questionnaire included in "A Vision for the Future". The Total and No Opinion percentages include questionnaire responses from all groups (employers, employees, learners, training providers, community and government). Employer and Employee responses are broken out and reported separately for reader interest.

### 1a A one-level advisory system

Some employer respondents recommended that the current LAC/PAC system should be replaced with a single provincial committee for each trade. These respondents further suggested that private industry should set up informal committees to provide more local input to the new, single-level provincial committees.



Other employers, however, stated that the LACs are their only link to the apprenticeship system. They recommended keeping the LACs and rejuvenating the LAC role.

Employee associations stressed the importance of expanding the role and responsibilities of the PACs. They noted that if the industry structure indicates that a PAC by itself is sufficient, then a one-level structure might be appropriate in that industry. However, they recommended that the system should continue to allow voluntary LACs to be established in trades where greater industry representation is needed.

#### 1b A trade-cluster approach

This proposal also received moderate (66%) support. Many employers and employees, and some training providers, expressed concern that trade clusters would slow the decision-making needed to make changes to training curricula. They expressed concern that trade clusters might lose sight of the special needs of individual industries.

Those who expressed interest in the trade cluster approach noted the possibilities for trade clustering, but did not identify significant advantages over the present system.

#### Other issues that were raised

- Some respondents commented that the advisory system appears
  designed to meet the needs of administration and training
  providers, rather than industry. In their view, the system lacks
  flexibility.
- A frequent recommendation was the need to establish processes for improving communication among the PACs, and among the PACs and stakeholders.
- Apprentices recommended that they be represented on the advisory committees. They suggested that surveying apprentices' views on course outlines would help keep training relevant to apprentices' needs.
- A training institute recommended that training providers be represented on advisory committees to assist with curriculum development.
- A few respondents commented that more effort is required to obtain industry input to nominations for the PACs. They indicated that there are gaps in trade-specific and geographical



representation. Some recommended that this problem be addressed through increased membership numbers and larger geographic areas. Some respondents recommended allowing voluntary membership on the PACs.

## 2 Extend recognition of apprenticeship training toward other post-secondary programs

Background: Albertans were invited to discuss whether apprenticeship training should receive accreditation toward other postsecondary programs in Alberta's colleges, technical institutes and universities.

This proposal received considerable (90%) support. Many respondents indicated that crediting completed apprenticeship training toward other post-secondary programs would encourage individuals to pursue life-long learning. Generally, there was a view that the adult learning system should make assessments and challenge exams more widely available so that prior learning in other fields is recognized.

The proposal was also supported as a means of making the trades more attractive to youth. Respondents indicated that high school students might be more attracted to careers in the trades if arrangements were in place to encourage a smooth transition from high school, to a trade, to a university program.

Institutions and instructors generally expressed support for the proposal. There was a view that additional resources might be needed, and that the accreditation should reflect the formal learning undertaken, not necessarily the full apprenticeship program.

## 3 Consider opportunities for flexible certification

Background: The consultation paper asked Albertans if training and certification in the craft areas of some trades and occupations would be appropriate, as long as full training and certification in the trade or occupation continued to be available.

Employee respondents expressed moderate support (67%) for training and certification in craft areas. They expressed concern that flexible certification would lead to fragmentation of trades training, and reduce employers' commitment to broad skill training. They commented that specialized training and certification would not

"Make the journeyman certificate the start and not the end of the formal training." – a training provider

"Apprenticeship training would be much more appealing if it could be credited to another related field..." – a 4th period apprentice

"...Would be a positive move . . .would allow trades people to advance their skills..."

- an employee association

The skills learned in an opprenticeship are applicable in many non-trade activities. This (proposal) would increase the value of a trade certificate, and encourage broadening of skills by employees."

- an employer association

"The challenge is to provide and certify specialist training while protecting the ultimate value in the diverse and broad-based training that a journeyman certificate provides." – an employer association

"Certification, in order to be respected and widely-accepted, must maintain standards of proficiency which are consistent across industry." – an employee association

"Program specialization will lead to program fragmentation."

a journeyman heavy equipment technician

"Long-distance learning, home-based learning and the ever-rising costs of institutional learning are creating opportunities previously unknown." – an employer association

"Private deliverers should be encouraged to undertake the development of some initiatives." – an employee association

"Alternative delivery formats which focus exclusively on the individual . . . limit the interaction between students and other students, . . . and with the instructor."

;- a journeyman

"Competency-based instruction is currently being offered successfully, and should be expanded where feasible." – a training institution

enhance worker flexibility and mobility, but increasingly put workers at risk in terms of long term employment as they would not have the skills to work outside the narrow specialization.

Support for the proposal was higher among employers, although they were divided on the proposal's merits. Some employers supported the concept, noting that it would allow them to more quickly meet emerging market demands for specific skills. Other employers disagreed, commenting that they must have well-rounded trades persons in their work. Recognizing that some workplaces depend on broad-based skills while others need specialized training, two employer associations suggested that consultations with each trade would be necessary to determine if flexible certification would be appropriate.

Training providers commented that a broad base of training often provides a necessary foundation for learning new technological skills as industry requirements change.

## 4 Increase flexibility in methods of formal instruction

Background: Albertans were asked if more alternatives to block release should be available, such as weekly apprenticeship instruction, and if more individually-paced learning opportunities should be developed. Views were invited on whether alternatives to on-campus training, such as home-study or study in a community setting or the workplace, would be desirable.

Most of the apprentices and journeymen who provided written comments indicated a preference for maintaining formal classroom instruction. They indicated that they were helped by an instructor's experience, that they benefited from the experiences of other apprentices, and that it was helpful to concentrate on their formal training requirement over an eight-week period. One group of apprentices expressed concern that not all students learn well from computers. They recommended that the province continue to offer instructor-based training while providing other options.

Many employers spoke in favour of more flexible methods of formal instruction. They expressed support for day release, weekend instruction, modular approaches, computer assisted self-study, and other methods which would allow better integration of training with work requirements. Some employers identified that apprenticeship training should reflect demonstrated competency, not time spent in the classroom. A few employers spoke in favour of maintaining block release for the compulsory trades, but noted that alternate methods might be appropriate for some non-compulsory trades.



A few employee associations were of the view that apprenticeship training is too closely aligned with publicly-funded institutions. They suggested that apprenticeship training could be made more responsive if private training providers were encouraged to develop training opportunities. This view was also supported by one employer association, who suggested that training delivery could be opened to any provider who could deliver training options effectively.

## 5 Promote apprenticeship and industry training in new occupations

Background: The consultation paper asked Albertans to comment on whether the apprenticeship model of industry training (on-the-job training and work experience combined with periods of formal in-school instruction) should be expanded and made available to individuals wanting training in other sectors of the economy.

There was considerable agreement (89%) that the apprenticeship model should be promoted for new occupations. It was noted that the apprenticeship model has proven its value in training skilled workers, and that when new trades and occupations are identified they should be recognized and training programs put in place.

Employee respondents stressed that the promotion of new occupations should not fragment existing trades. Some submissions noted that there are a variety of issues which need to be addressed in developing new occupations. These issues include the funding and resources to establish initial course outlines and curriculum, the need to facilitate the creation of a provincial advisory committee, the need to maintain industry standards and examinations, and the need to operate and deliver training programs once the designation is established.

Respondents noted that it was important to promote new trades, as well as occupations.

"The apprenticeship method of training has proven its value and it is likely that success could be repeated in other areas."

an employer association

"When talking to people who are not apprentices, they often say that they wish their fields had such a program." – a 4<sup>th</sup> period apprentice plumber

"Agree, only if it does not lead to fragmentation of existing trades." – an employee association "This (less regulation) may be appropriate in some trades, but a level of regulation must be retained in others." – an employer association

"Regulations pertaining to entrance requirements and ratios are in place to ensure apprentices are competent, receive proper worksite training and are paid a fair wage while apprenticing." – an employee association

"Worker safety should be a prime concern when deregulating."
– an apprentice

## **Accessibility**

The Goal.....Increase opportunities for Albertans to become apprentices and trainees, and increase opportunities for employers to hire and train apprentices and trainees.

A Vision for the Future identified four possible strategies for maintaining or improving accessibility to apprenticeship and industry training. Each of the four strategies is discussed below.

## 1 Review the regulatory framework

Background: Albertans were asked whether a review of the apprenticeship and industry training regulatory framework is needed. Should government continue to legislate in particular areas or are there less intrusive means of assuring quality training?

There was general support (78%) for a review of the regulatory framework. Cautions were raised by employees and apprentices. Employee organizations expressed concern that allowing employers to be self-regulating could adversely impact the safety of employees and consumers, and the quality of work and services. They stressed that while parts of the regulatory framework might be reviewed, the determination of trade regulations should continue to be the responsibility of the industry PAC. Written submissions from apprentices suggested that maintaining worker safety and fair pay for apprentices should be primary considerations in any review.

Most employers expressed support for reviewing the regulations. Some regard the current regulation of journeyman/apprentice ratios and apprentice wage ratios as particularly problematic. Some questioned the role of the department as an enforcer. However, one employer association noted that a level of regulation must be retained in the compulsory trades to safeguard public health and safety.

Table 4: Goal: ACCESSIBILITY

Respondents	Review Regulations (See #1)	Clarify Compulsory Certification (See #2)	Communicate Alternative Access (See #3)	Expand Oppor- tunities for Youth (See #4)
Agree: Total	78%	86%	90%	93%
Employer	86%	90%	92%	94%
Employee	73%	84%	88%	92%
Disagree: Total	16%	9%	6%	4%
Employer	9%	6%	6%	4%
Employee	21%	11%	7%	6%
No Opinion	6%	5%	4%	2%

Source: Data represent results from the questionnaire included in "A Vision for the Future". The Total and No Opinion percentages include questionnaire responses from all groups (employers, employees, learners, training providers, community and government). Employer and Employee responses are broken out and reported separately for reader interest.



"There is lots of confusion about why some trades are compulsory and others are optional."

– an employer association

"The system already exists...and we are comfortable with it." – an employee association Respondents also commented on other regulations. One training institution suggested that the government should share responsibility for ensuring that on-the-job training reflects curriculum guidelines. An employer organization also suggested that evaluation programs are needed to monitor training in the workplace. There was also comment that entry levels to apprenticeship programs should be raised.

## 2 Clarify the criteria for designation of compulsory certification trades

Background: The consultation paper invited Albertans' views on whether the Board should work with industry to redevelop the criteria for the designation of compulsory certification trades. The paper suggested that new criteria might be based on the probability and severity of adverse impacts on public safety, worker safety and the environment associated with the materials, methods or technology involved in the trade.

A significant number of respondents (86%) indicated support for clarifying the criteria for compulsory certification. However, the written submissions suggest that respondents have different views as to where "clarified criteria" would lead.

Some employers expressed the view that the only argument in favour of compulsory certification is that it serves to increase training. Otherwise, they see compulsory certification as interfering with market forces in both the job market and the training systems. In their view, safety considerations could also be better met through the enforcement of other processes (building codes, licensing requirements, Occupational Health and Safety regulations) than through compulsory certification. Concern was expressed regarding exemptions provided under the *Apprenticeship and Industry Training Act*.

Other employers noted that consistent application of the existing criteria would improve understanding and clarity. They noted that one area where clarity is needed is assurance that government funding of training will continue to be uniform across the trades, regardless of whether they are compulsory or optional certification trades.

Some employers and trades instructors recommended that if Alberta is committed to a world-class workforce, then all trades should be compulsory certification trades. This view was echoed by some employee respondents. Overall, employee associations indicated satisfaction with the current process. They expressed concern that clarifying the criteria would be a precursor to de-designating some compulsory trades. One association suggested that clarification of

the criteria would be desirable if it would speed the designation of new trades.

There was broad acknowledgment that public safety, worker safety and the environment might be considerations for compulsory certification, but there was no consensus that these should be the criteria determining compulsory certification. Some employer respondents suggested that if worker safety and environmental considerations are regulated by other legislation, then public safety and majority support from the employers in the industry should be the major criteria determining compulsory certification.

Apprentices stated that safety should be a paramount consideration in designating a trade. They also expressed concern that any redesignation of trades would lead to lower wages, less interest in apprenticeship by young Albertans, and lower quality work and services.

## 3 Communicate the alternative ways of accessing apprenticeship training

Background: Albertans were asked to comment on the need to better communicate the alternative ways of beginning to train for a career in the trades and occupations (recognized high school programs, pre-employment programs, or technical or technology programs at institutes and colleges). Prospective apprentices would still have to find an employer to train them.

There was considerable support (90%) for wider communication of the alternative ways to access apprenticeship. Employers and employees agreed that prospective apprentices need to be aware of the alternate routes to beginning training.

Employers expressed support for improved communication, but some also noted that more structure to the alternative approaches is needed if they are to be successful. The Registered Apprenticeship Program (RAP) was generally acknowledged as a good approach to beginning apprenticeship training. Some employers suggested that apprenticeships should begin earlier, and that the framework for routes into apprenticeship training should be in place in the early school years.

Employee associations supported the proposal. However, a few noted that the intent should be to promote the overall quality and availability of training achieved through many approaches to training, not to increase the number of approaches which involve training in institutions. One training provider cautioned that increasing

"Alternative routes can and often do have substantial benefits that traditional apprenticeship does not." – a private provider

"The alternative ways to complete apprenticeship need to be communicated." – a journeyman

"This (alternative routes) is strongly supported, but more structure is required to ensure that the job gets done."

- an employer association



"Industry should be hiring and encouraging more youth into the trades. Needs to be more promotion of the trades, particularly in schools."

participant, Minister's
 Forum on Adult Learning

"Encourage development of the Registered Apprenticeship Program . . . it links employers to young people who have aptitudes to become good trades people." – an employer

"Emphasize encouraging, promoting and supporting young people . . . to enter apprenticeship immediately after Grade 12, or better yet, Grade 10."

– a journeyman machinist

alternative routes to apprenticeship might fragment the delivery of training and jeopardize the quality of instruction.

## 4 Expand opportunities for youth in apprenticeship and industry training

Background: Albertans were asked to comment on suggestions to expand programs to attract youth into the trades and occupations. Expanding the Registered Apprenticeship Program for high school students was suggested, and the development of a similar program for youth interested in the occupations was also proposed for discussion.

There was strong support (93%) for increasing youth interest in the trades and occupations. It was noted that apprenticeship is high-quality training leading to high-paying jobs, but that this message has not been successfully communicated to youth.

Many respondents identified the need to address societal stigmas associated with careers in the trades. There were frequent comments that schools direct students with low marks into vocational programs. This is seen as perpetuating the perceived stigma of working in the trades, and also as lowering the standards and the expectations of students who wish to pursue trades training. Some employer associations agreed that RAP should be expanded, but that there must be higher expectations of students and the students must have a stronger desire to succeed.

Some employee associations suggested that the best way of attracting youth into apprenticeship would be to expand apprenticeship training as a whole. They noted that expanding apprenticeship training, and building on society's investment in skilled workers already in the workforce, would encourage public understanding and support for trades and occupations. Youth interest in apprenticeship would then increase as a matter of course.

Training providers generally expressed support for RAP and for cooperative apprenticeship programs. Like other respondents, they suggested that there is a need to redesign high school vocational programming so that it provides a more challenging atmosphere for learning. There was a suggestion to have the technical institutes coordinate in-house training programs for high schools. One training provider suggested that vocational programming should be dropped altogether and replaced with industry-delivered work experience.

## **Affordability**

**The Goal....** Apprenticeship and industry training will be affordable for the taxpayer, employers, and apprentices and trainees. The system will be fair and efficient.

A Vision for the Future identified four possible strategies for maintaining or improving the affordability of apprenticeship and industry training. Each of the four strategies is discussed below.

## 1 Review the administrative framework for apprenticeship and industry training

Background: The consultation paper invited Albertans to comment whether a review of the administrative framework of apprenticeship and industry training is needed. The review would identify alternative means of administering the system, or identify adjustments that could make the current administrative approach more efficient.

There was significant support (83%) for a review of the administrative structure of apprenticeship and industry training. Some respondents made specific recommendations for substantial administrative reform, and others offered suggestions on particular administrative matters.

Table 5: Goal: AFFORDABILITY

Respondents	Review Adminis- trative Frame- work (See #1)	Provide Apprentices Financial Support (See #2)	Greater Industry Participation (See #3)	Avoid Duplica- tion in Instruc- tion (See #4)
Agree: Total	83%	87%	93%	90%
Employer	88%	86%	90%	93%
Employee	81%	89%	95%	86%
Disagree: Total	10%	10%	4%	7%
Employer	7%	11%	6%	4%
Employee	12%	9%	3%	9%
No Opinion	6%	2%	3%	3%

Source: Data represent results from the questionnaire included in "A Vision for the Future". The Total and No Opinion percentages include questionnaire responses from all groups (employers, employees, learners, training providers, community and government). Employer and Employee responses are broken out and reported separately for reader interest.

A few employee associations recommended major changes to the administrative structure of apprenticeship and industry training, such as eliminating the Alberta Apprenticeship and Industry Training Board. Other employee associations, employers and training providers, however, stated that the current overall administrative framework is appropriate to the needs of industry and the apprentice, and it just needs streamlining and more efficiency. Some employers commented that the government's role in setting standards and issuing certification is fundamental to the system and must be retained.

"The financial considerations are major, but don't lose the quality in the system in an effort to reduce costs."

a journeyman motor mechanic

"The costs of training should be shared by government, business and education. The community as a whole is responsible for training young people."

– an employer association

"Agree that a review . . . is probably not a bad idea . . . There are a number of ways to reduce administrative costs and increase industry contribution." – an employee association



One employer association suggested that a payroll tax could be used to raise revenues for apprenticeship and industry training. They suggested that the tax could be applied to all employers so that those employers who choose not to employ or train apprentices would still be helping to finance apprenticeship. They suggested that this tax proposal might, in particular, be applied to employers in the compulsory certification trades.

Other suggestions for specific administrative reforms included:

- separating the mandate for instruction from the mandate for enforcement
- ensuring adequate numbers of knowledgeable administrators in the system
- simplifying the committee system, or eliminating remuneration for members
- establishing a national apprenticeship registry
- making better use of public training institutions
- giving industry the responsibility for training, rather than institutions
- requiring all industry to financially support training costs, through taxes or other means
- establishing processing fees for apprentices.

## 2 Provide apprentices with appropriate financial supports

Background: Albertans were asked about appropriate levels of support to apprenticeship and industry training, and to apprentices and trainees.

There was significant agreement that apprentices should receive financial assistance if needed to undertake and complete their training. Apprentices and journeymen who responded indicated that apprentices make a considerable contribution to the costs of their training through the taxes they pay while they are employed. One respondent noted that student assistance is particularly needed during block release for formal instruction, but that alternative training options would help apprentices to stay on the job and generate an income while they undertake formal instruction.

"Apprentices are learners. They ought to be treated in the same way as any other secondary school student and provided with appropriate financial supports"

- an employee association

"I was helped a great deal . . .during apprenticeship training and ensuring a trained workforce, we will benefit from a higher safety rate that will help save money in other areas" – a journeyman carpenter

"Agree. Include criteria that recognize the unique financial situation of apprentices and the training timetable of apprenticeship training."

– an employer association

Some employee associations noted that apprentices vary widely in age, and may have families and financial commitments when they begin their apprenticeship. They expressed the view that industry and society, as well as individuals, benefit from training, and that apprentices should not pay the major portion of training costs. A few employee associations also stated that the Employment Insurance program should be used for employer/employee insurance, and that training support should be provided through general revenue.

Some employers noted that the unique timetable of apprenticeship training (block release) requires a streamlined and prompt approval process for financial assistance. They noted that funding criteria may also need to be examined given apprentices' need for travel and to buy tools. One employer association recommended that industry should attract and assist apprentices through offering more bursaries and scholarships.

With respect to apprenticeship tuition fees, many respondents expressed concern that fees will discourage some individuals from training. Respondents either opposed the fees, or recommended that they be kept low and that student assistance be available to individuals who require support.

Other respondents agreed that there is a need to provide financial support to apprentices, but that such support could be partly financed through journeyman registration fees and fees for services which benefit apprentices. There was a suggestion that the federal government be encouraged to provide tax credits for the cost of tools.

Some respondents noted that the Government of Alberta and the Government of Canada had recently signed a Labour Market Development Agreement. They expressed the view that support for apprenticeship training should be a priority for government.<sup>1</sup>

## 3 Encourage greater industry participation in renewing technology for in-school training

Background: Albertans were asked to comment whether employers might increase their contribution to apprenticeship training through partnerships between industry and post-secondary institutions to renew tools and equipment used in formal training.

There was strong support (93%) that industry should be encouraged to increase contributions of tools and equipment for apprenticeship training.

"Contributions should continue and be expanded. They must be of high quality, meet the needs of apprentices, and accessible to all."

- an employer association



<sup>&</sup>lt;sup>1</sup> Note: The Canada-Alberta Labour Market Development Agreement was signed on December 6, 1996. The Agreement allows Alberta to assume an expanded role in the design and delivery of labour market programs and services for unemployed people in Alberta, effective April 1, 1997. The federal government continues to provide Employment Insurance for qualifying apprentices.

"A greater level of industry participation in renewing technology for in-school training is required." – an employee association

"There should be greater encouragement for manufacturers to provide more equipment and capital donations for the apprenticeship program."

– a training institution

"Developing common modules will increase flexibility in training delivery and reduce duplication among similar trades."

- a journeyman

"Efficiencies could be realized by combining instruction to different trades." – an employer association

"Disagree...formal instruction is an extension of the job site and knowledge is best tied to jobsite applications."

- an employee association

Some employer respondents favoured the proposal, while others disagreed and recommended that the technological element of instruction should only be occurring in the workplace. It was suggested that manufacturers could be encouraged to donate new tools and equipment for classroom demonstrations of new technologies.

A few employee associations suggested that institutions should establish new approaches for providing students with access to tools and technologies. They suggested that institutions should enter into partnerships with organizations which have training centres, and who want to partner in providing classroom and shop training. One employee association disagreed entirely with the proposal, stating that education and training must remain entirely a government responsibility.

One training provider commented that manufacturers should be encouraged to support apprenticeship training through providing training aids, training equipment and work experience to accompany formal instruction.

## 4 Avoid duplication in providing formal instruction

Background: Albertans were asked to comment whether developing common curricula or individual learning units for related trades would be a means of using training facilities and the curriculum development process more efficiently.

There was considerable support (90%) for this proposal. Employer respondents suggested that savings could be obtained by developing common training modules in some trades, through cross-training and by multiple certifications.

While employee respondents generally supported the proposal, a few employee associations disagreed.

A government contributor suggested that greater recognition of competencies developed in secondary school could reduce duplication in formal instruction and save costs. One training institution suggested that expanding local training centres could reduce costs for employers and apprentices, through more flexibility in coordinating work schedules and formal instruction.



"Industry must be recognized as a much more significant partner than in the past and be much more intimately involved." – an employer association

"Agree to a review . . . a stronger role for industry is needed."

- an employee association

"Having a clear idea of what your responsibilities are in a partnership is important."

- a training provider

"What has been lacking ... is a true partnership. Government has tended to take over the process, with limited industry consultation or involvement. Alternatively, government participation is needed for (apprenticeship) to operate successfully." – an employer association

## **Accountability**

**The Goal....** All participants will have clearly identified roles and responsibilities, and will be accountable for achieving quality results in their roles.

## 1 Clarify roles for apprenticeship and industry training participants

Background: Albertans were asked to comment on the need to clarify roles and responsibilities in Alberta's apprenticeship and industry training system, particularly in light of any new roles or responsibilities associated with the possible strategies identified in the consultation paper.

It was agreed (92%) that greater clarity is needed in the roles of the many participants in the apprenticeship and industry training system. Some employee associations suggested that a stronger role for industry is needed in the future. One employee association noted that any clarification of roles must retain government's role in education and training.

Employer respondents expressed support for an industry discussion of stakeholder roles. One employer association supported clarifying the understanding of roles, but does not see any need to change current roles and responsibilities. Another employer association suggested that employer trade associations would also be able to assist in promoting apprenticeship, but that they may need financial assistance to help develop "awareness" programs.

One private training provider noted that the objective should be to both clarify roles and achieve commitment to responsibilities. A training institution suggested that government should be careful to remember the part it plays in ensuring that a highly trained work force is available to attract business and industry. There were suggestions that industry should play a greater role in financing the system, and that there may be a need for a central monitoring agency.

Table 6: Goal: ACCOUNTABILITY

Respondents	Clarify Roles of Participants
Agree: Total	92%
Employer	94%
Employee	90%
Disagree: Total	4%
Employer	2%
Employee	5%
No Opinion	5%

Source: Data represent results from the questionnaire included in "A Vision for the Future". The Total and No Opinion percentages include questionnaire responses from all groups (employers, employees, learners, training providers, community and government). Employer and Employee responses are broken out and reported separately for reader interest.

## **Next Steps**

The comments heard through the focus groups, the Minister's Forum on Adult Learning, written submissions and responses to the discussion paper will be carefully reviewed and considered by the Apprenticeship and Industry Training Board and the Department of Advanced Education and Career Development.

In the spring of 1997, the Board and the Department will prepare recommendations to the Minister of Advanced Education and Career Development on measures that could be taken to enhance apprenticeship and industry training in Alberta, and ensure that the system continues to meet the needs of learners, industry, and society both now and in the future.



## **APPENDIX**

## Summary Facts on Apprenticeship and Industry Training in Alberta

## Legislation

Alberta's Apprenticeship and Industry Training Act is the governing legislation for apprenticeship and industry training. The Act establishes the Alberta Apprenticeship and Industry Training Board (the Board) as the body responsible for advising the Minister of Advanced Education and Career Development on Alberta's needs for skilled labour and on the training required for certification in a trade or occupation.

## **System Participants**

Employers, employees, training institutions, and government all have roles in the apprenticeship and industry training system. Industry plays the lead role by identifying the need for training programs. Industry also ensures that the course outlines and standards for their training programs are current.

Provincial Apprenticeship Committees and Occupational Training Committees, comprised of equal representation from employers and employees, are responsible for advising the Board on the training standards for their trade or occupation, respectively. Most trades also have Local Apprenticeship Committees to address local issues.

Alberta has more than two dozen colleges and universities, technical institutes and specialized schools of training. Two technical institutes and some colleges and other providers deliver programs for the formal instruction components of apprenticeship and occupational training.

The Department of Advanced Education and Career Development works with the Board and Provincial Apprenticeship Committees to develop training standards. Department staff also administer the apprenticeship program by keeping a record of apprentices' contracts and training progress. Apart from certification, the Department provides limited administrative support to designated occupations.

## **Trades and Occupations in Alberta**

There are 50 trades in Alberta, and 4 occupations. Thirty-nine of Canada's 44 Red Seal trades are available in Alberta. Ninety-three percent of all apprentices in Alberta work in trades that are designated as Red Seal trades.



Alberta's trades are designated, in legislation, as either a compulsory certification trade or an optional certification trade. Where there are significant issues of worker or public safety, the trade may be designated as requiring compulsory certification.

rade Name	Certification	Red Seal*
Agricultural Mechanic	Optional	<b>√</b>
Appliance Serviceman	Compulsory	. 🗸
Auto Body Technician	Compulsory	<b>✓</b>
Automotive Service Technician	Compulsory	<b>✓</b>
Baker	Optional	<b>✓</b>
Boilermaker	Compulsory	<b>✓</b>
Bricklayer	Optional	<b>√</b>
Cabinetmaker	Optional	<b>√</b>
Carpenter	Optional	<b>✓</b>
Communication Electrician	Optional	
Concrete Finisher	Optional	
Cook	Optional	
Crane & Hoisting Equipment Operator	Compulsory	
Electrical Rewind Mechanic	Optional	
Electrician	Compulsory	
Electrician Electronic Technician	Compulsory	
	Compulsory	· ·
Elevator Constructor	Optional	
Floorcovering Installer	Compulsory	<u> </u>
Gasfitter		
Glassworker	Optional	<del></del>
Hairstylist	Compulsory	<del></del>
Heavy Equipment Technician	Compulsory	
nstrument Mechanic	Optional	<del></del>
Insulator	Optional	<del></del>
lronworker	Compulsory	
Landscape Gardener	Optional	
Lather-Interior Systems Mechanic	Optional	<b>▼</b>
Locksmith	Optional	
Machinist	Optional	
Millwright	Optional	•
Motorcycle Mechanic	Compulsory	· ·
Painter & Decorator	Optional	<b>√</b>
Partsman	Optional	<b>√</b>
Plumber	Compulsory	<b>✓</b>
Power Lineman	Optional	<b>✓</b>
Power System Electrician	Optional	
Printing & Graphic Arts Craftsman	Optional	
Recreation Vehicle Mechanic	Compulsory	
Refrigeration & Air Conditioning Mechanic	Compulsory	✓
Roofer	Optional	✓
Sawfiler	Optional	
Sheet Metal Worker	Compulsory	✓
Sprinkler System Installer	Optional	<b>✓</b>
Steamfitter-Pipefitter	Compulsory	<b>✓</b>
Structural Steel & Plate Fitter	Optional	✓
Tilesetter	Optional	
Tool & Die Maker	Optional	<b>✓</b>
Transport Refrigeration Mechanic	Optional	
Water Well Driller	Optional	
Welder	Compulsory	

Interprovincial Standards Red Seal Trade.

Totals: 19 Compulsory Certification Trades, 31 Optional Certification Trades, 39 Red Seal Trades.

Note: Gas Utility Operator, Plasterer, Construction Craft Labourer and Warehousing are Designated Occupations under the Alberta Apprenticeship and Industry Training Act.



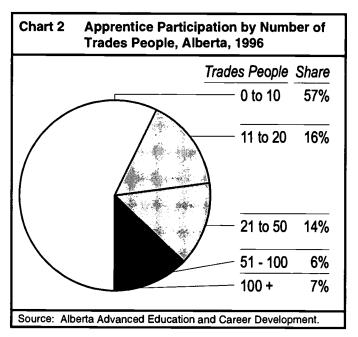
Occupations may be designated, in regulations, as having prescribed standards and training required for certification. Training and certification are not compulsory in designated occupations.

The designation process, whether for a trade or an occupation, is normally initiated by industry identifying a need for a training program. The process includes a determination of industry standards, determination of training and certification requirements, confirmation of the degree of industry support, and consideration of public and worker safety. A public hearing is a legislated requirement prior to designating a trade as a compulsory certification trade.

Apprenticeship training in Alberta is concentrated in construction

(approximately 40%), manufacturing (24%), and retail and wholesale trades (23%).

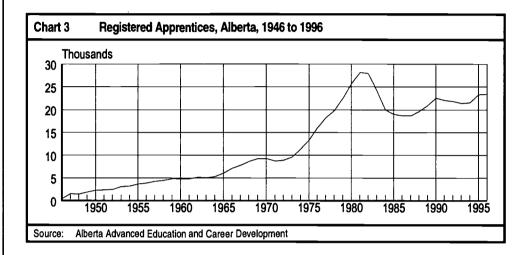
Most apprentices train in small Alberta firms. Alberta firms employing 10 or fewer trades people train about 57% of all apprentices (Chart 2).





## **Growth in Number of Registered Apprentices**

At the end of 1996, there were 24,836 apprentices registered in Alberta. Chart 3 indicates the growth in apprenticeship registrations over the past 50 years. The increased registrations reflect a number of factors, including population growth, economic growth, technological development, and the increase in the number of designated trades.







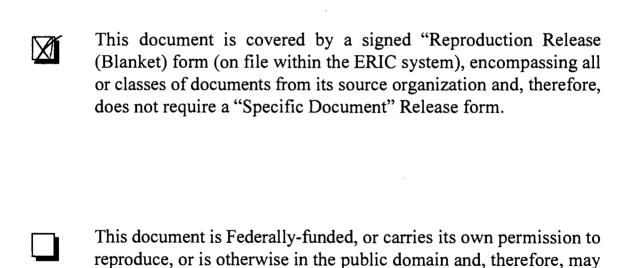
## **U.S. Department of Education**



Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

## **NOTICE**

## **REPRODUCTION BASIS**



(either "Specific Document" or "Blanket").

be reproduced by ERIC without a signed Reproduction Release form

